SONY

3-759-424-21(1)

Videocassette Recorder/Player

Model:

SVO-5800/5800P
SVP-5600/5600P

Operating Instructions page 2 (E)

Before operating the unit, please read this manual thoroughly and retain it for future reference.

S VHS

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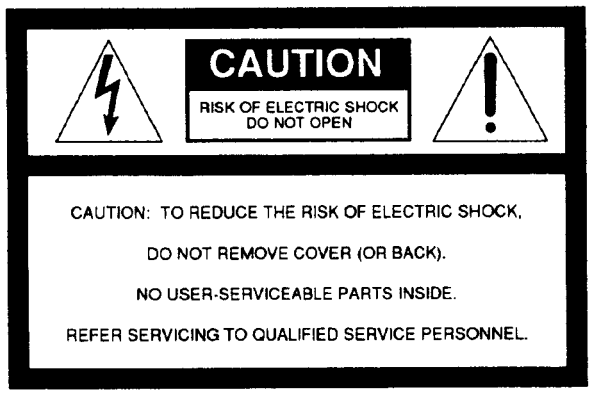
Owner's Record

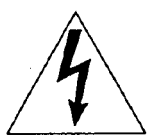
The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution
Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

For the customers in USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

For the customers in Canada
This apparatus complies with the Class A limits for radio noise emissions set out in Radio Interference Regulations.

For the customers in the United Kingdom

WARNING
THIS APPARATUS MUST BE EARTHED

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Table of Contents

Introduction

About This Manual ..... **4(E)**
Features ..... **5(E)**
Identification of Parts and Controls ..... **7(E)**
Front Panel ..... 7(E)
Rear Panel ..... 9(E)
Precautions ..... **11(E)**
Safety Precautions ..... 11(E)
Handling Precautions ..... 11(E)

Basic Operation

Handling Cassettes ..... **13(E)**
Compatible Cassettes ..... 13(E)
Inserting and Ejecting a Cassette ..... 13(E)
Preventing Accidental Erasure ..... 14(E)
Playback ..... **15(E)**
Basic Playback Operations ..... 15(E)
If Snow or Streaks Appear on the Picture – Tracking Adjustment 17(E)
Superimposing the Text on the Monitor Screen ..... 18(E)
Recording (SVO-5800/5800P only) ..... **20(E)**
Basic Recording Operations ..... 20(E)

Advanced Operation

Using the Unit in a System ..... **23(E)**
Connecting a Player and a Recorder – Sample Connection for Cut Editing System ..... 23(E)
Connecting Two Players and a Recorder – Sample Connection for A/B Roll Editing System ..... 28(E)
Adjustments for Precise Editing – Phase Adjustments ..... 33(E)
Time Data ..... **36(E)**
Displaying Time Data ..... 36(E)
Settings the Time Code and User Bit Initial Values (SVO-5800/5800P only), and Cue-up Point ..... 37(E)
Recording Time Code and User Bit on the Tape (SVO-5800/5800P only) ..... 40(E)
Changing the Settings of the Unit – Set-up Menu ..... **43(E)**
Structure of Set-up Menu ..... 43(E)
Set-up Menu Descriptions ..... 45(E)
Changing the Settings of Set-up Menu ..... 51(E)

Appendixes

Operational Problems ..... **57(E)**
Alarm Messages ..... 57(E)
Self-Diagnosis Function – Error Codes ..... 58(E)
Troubleshooting Chart ..... 59(E)
Regular Checks and Maintenance ..... **60(E)**
Head Cleaning ..... 60(E)
Checking the Time of Maintenance – Digital Hours Meter ..... 61(E)
Specifications ..... **63(E)**

About This Manual

This manual explains how to use the SVO-5800/5800P Videocassette Recorder and SVP-5600/5600P Videocassette Player. The SVO-5800 and SVP-5600 are the models using the NTSC color system, and the SVO-5800P and SVP-5600P using the PAL color system. When the functions differ for each model, they are distinguished by such descriptions as "SVO-5800/5800P only."
A Menu Card is also included with this manual. Please use it as a quick reference when changing the settings of the unit through the menu system.
This manual does not include operations using the editing control unit. Please read the manual attached to the editing control unit for these operations.

Features

The SVO-5800/5800P and SVP-5600/5600P are high-quality videocassette recorder/players employing the S-VHS format. By connecting an editing control unit and operating from it, high-quality and high-precision editing is possible.

High Picture Quality

Built-in CPI (Chroma Process Improvement) circuit

The built-in CPI circuit provides a high chroma resolution and improves color reproduction. This allows you to obtain a high-quality picture with clear contour.

YX filter

The SVO-5800/5800P and SVP-5600/5600P use a YX filter to reduce cross-color (where one color mixes with another) and beat (diagonal stripes).

Built-in Time Base Corrector (TBC)

The built-in time base corrector allows you to obtain a stable playback picture with no horizontal jitter or color fluctuation.

High Sound Quality

Hi-fi audio recording (four-channel audio signal recording) (SVO-5800/5800P only)

The SVO-5800/5800P incorporates a hi-fi (AFM: Audio Frequency Modulated) stereo audio recording system to provide high-quality sound recording. The recording and playback of two channels of both normal audio and hi-fi audio, giving a total of four channels, is possible. Normal audio or hi-fi audio can be selected for monitor during playback.

Audio noise reduction

The normal audio tracks of channels 1 and 2 use Dolby* NR B-type noise reduction, which reduces the tape noise.

* **Dolby NR**
Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⊡⊡ are trademarks of Dolby Laboratories Licensing Corporation.

Full Range of Functions

Built-in time code generator (SVO-5800/5800P only) and reader

The built-in time code generator and reader allow the unit to record (SVO-5800/5800P only) and read time codes (LTC [1], VITC [2]) or user bits simultaneously with the video and audio signals.

Remote control function

This unit can be operated from a remote control unit through the RS-422A serial interface.
Jog and shuttle operations can also be remote controlled by the SVRM-100 remote control unit (not supplied).

Superimposed text output

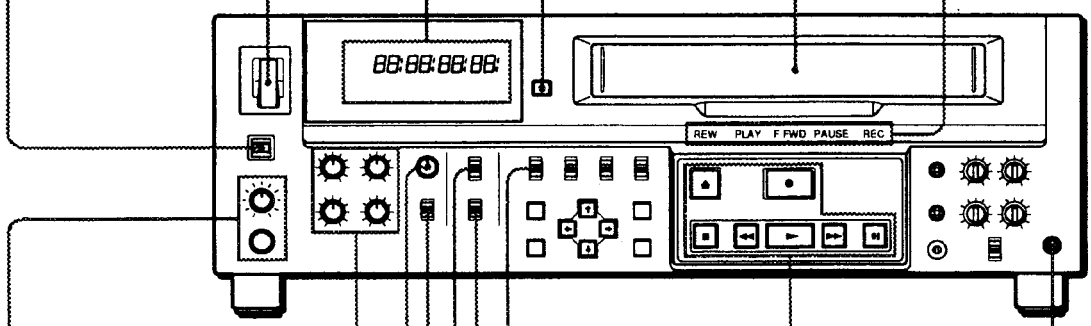
Using menu operations, various information such as time data, tape speed and system settings can be superimposed on video signals and output from the MONITOR VIDEO connector.

1) **LTC (Longitudinal Time Code):** Time code which is recorded on the normal audio channel 2 (longitudinal track) of the tape.
2) **VITC (Vertical Interval Time Code):** Time code which is recorded on the vertical interval of the tape.

Identification of Parts and Controls

Front Panel

The illustration below shows the SVO-5800/5800P.



REMOTE/LOCAL switch
Selects whether the unit is controlled remotely by a device connected to the 9-pin REMOTE connector on the rear panel (REMOTE 9P), or locally from the front panel of the unit (LOCAL).

Indicators
(see page 8(E))

POWER switch

COUNTER RESET button
Resets the time counter of CTL.

Cassette compartment

Tape transport indicators
Indicates the transport status of the tape.
REW (rewind), PLAY (playback), F FWD (fast forward), PAUSE (pause), REC (record) (SVO-5800/5800P only)

HEADPHONES connector (stereo phone jack) and LEVEL (headphones level) control

AUDIO LEVEL control (SVO-5800/5800P only)
The NORM control adjusts the audio level in normal audio recording, and the Hi-Fi control, in hi-fi recording (AFM recording), for each channel.

TRACKING control
Use this control to adjust tracking when playing back a tape recorded with another video recorder. Set it to FIXED in ordinary use.

CH-2 METER switch
Selects the function of the CH-2 indicator of the audio level meter. It can be used as an audio level meter (AUDIO) or as a tracking meter (TRACKING).

VIDEO IN SELECT switch (SVO-5800/5800P only)
Selects the video signals to be input to the unit. When it is set to the BLACK position, the built-in black burst signal is selected, which is convenient for making a tape to be edited.

METER switch
Selects the audio signals to be displayed on the audio level meter (normal audio or Hi-Fi).

MONITOR OUT CH-1/MIX/CH-2 selector
Selects the audio signals to be output through the HEADPHONES connector or MONITOR AUDIO connector. When it is set to the MIX position, stereo sound is output through the HEADPHONES connector, and mixed sound of channel 1 and channel 2 through the MONITOR AUDIO connector.

REMOTE connector (minijack)
Connects the SVRM-100 remote control unit (not supplied), etc.

Tape transport control buttons
EJECT (cassette eject) button
REC (record) button (SVO-5800/5800P only)
Press the PLAY button while pressing this button to start recording.
STOP button
REW (rewind) button
PLAY (playback) button
F FWD (fast forward) button
PAUSE button

Identification of Parts and Controls

Indicators

TIME CODE : Lights when time code is selected in the menu.

DOLBY NR : Lights when Dolby NR is selected in the menu.

AUDIO LIMITER (SVO-5800/5800P only): Lights when audio limiter is selected in the menu.

S-VHS: Lights while playing a cassette with S-VHS recording, or when S-VHS recording is selected in the menu.

HI-FI: Lights up while playing a cassette with hi-fi recording or when hi-fi recording is selected in the menu.

(cassette): Lights when a cassette is inserted.

REC INHIBIT(SVO-5800/5800P only): Lights when a cassette without a safety tab is inserted.

FRAMING: Lights while playing a cassette with correct framing, or when framing is selected in the menu.

TBC (Time Base Corrector): Lights while video signals are output through the time base corrector.

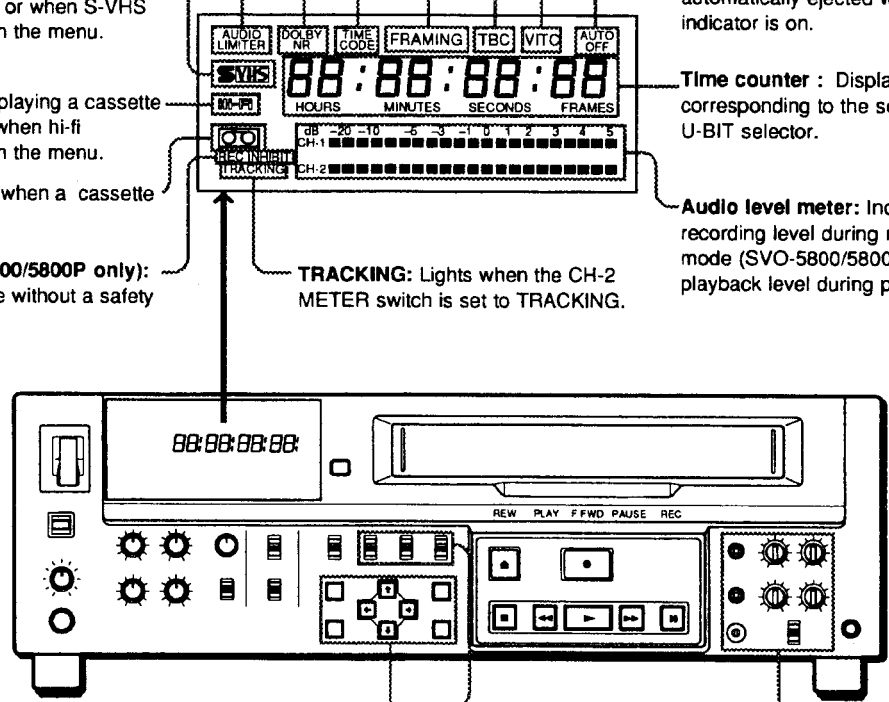
VITC (VITC time code): Lights when VITC recording is selected in the menu.

AUTO OFF: Lights if condensation has developed. The cassette is automatically ejected when this indicator is on.

Time counter : Displays the time data corresponding to the setting of CTL/TC/U-BIT selector.

Audio level meter: Indicates the recording level during recording/EE mode (SVO-5800/5800P only), and playback level during playback.

TRACKING: Lights when the CH-2 METER switch is set to TRACKING.



Menu/time code operation buttons
MENU button
TC PRESET (time code preset) button
↑ ↓ → ← (arrow direction) buttons
RESET(NO) button
SET(YES) button

For details on how to use the menu/time code operation buttons, see the section "Changing the Settings of Set-up Menu" (page 51(E)).

TIME CODE control block
CTL/TC/U-BIT (time counter display) selector
LTC/AUTO/VITC (TIME CODE) selector
EXT/INT (time code generator) switch (SVO-5800/5800P only)

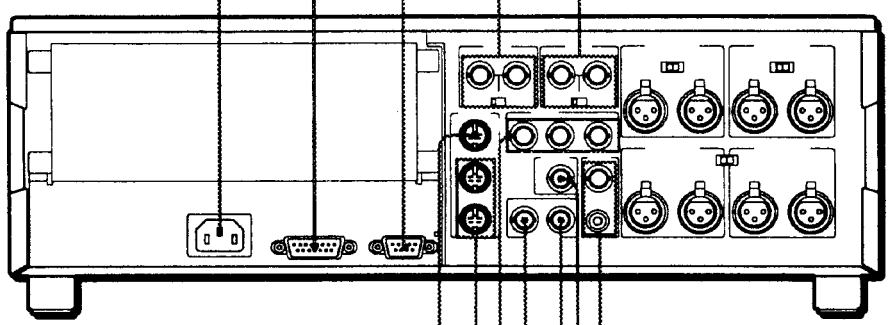
For details on how to use the time code control block, see the section "Time Data" (page 36(E)).

TBC CONTROL (Time Base Corrector control) block
SYNC PHASE (system sync phase) screw
SC PHASE (sub-carrier phase) screw
Y/C DELAY (Y/C delay adjustment) screw
VIDEO (video level adjustment) control
CHROMA (chroma adjustment) control
SET UP (set up adjustment) control
HUE (hue adjustment) control
BYPASS/LOCAL/REMOTE (time base corrector) selector
Selects the operation mode of the time base corrector.
BYPASS: Outputs a signal which did not go through the time base corrector.
LOCAL: Outputs a signal which went through the time base corrector. Adjust with the controls and screws on the unit.
REMOTE: Outputs a signal which went through the time base corrector. Adjust with an external remote control unit.

For details on how to use the TBC CONTROL block, see the section "Adjustments for Precise Editing — Phase Adjustments" (page 33(E)).

Rear Panel

The illustration below shows the SVO-5800/5800P.



REMOTE 9P connector

TBC REMOTE (Time Base Corrector remote) connector (15-pin)

AC IN connector

VIDEO IN connectors (BNC type) and 75-ohm termination switch (SVO-5800/5800P only)
Inputs a composite video signal. Two connectors are made loop-through.

REF VIDEO IN (reference video input) connectors (BNC type) and 75-ohm termination switch
Inputs a reference video signal. Two connectors are made loop-through.

S VIDEO IN connector (4-pin) (SVO-5800/5800P only)

S VIDEO OUT 1, 2 connectors (4-pin)

COMPONENT VIDEO OUT connector (BNC type)
Use the SVBK-170 component output board (not supplied) to output video signals (Y, R-Y, B-Y).

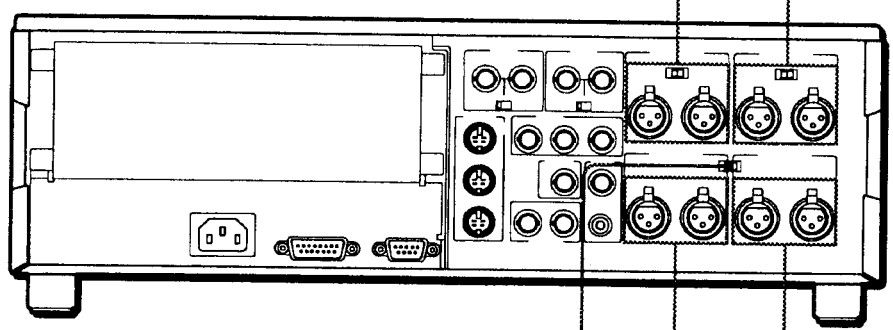
TIME CODE IN connector (BNC type) (SVO-5800/5800P only)

MONITOR VIDEO output connector (BNC type)/AUDIO monitor output connector (phono jack)
The time data and settings of the internal menu are superimposed and output through the MONITOR VIDEO connector.

VIDEO OUT connector (BNC type)
Outputs a composite video signal.

TIME CODE OUT connector (BNC type)

Identification of Parts and Controls



AUDIO IN (HI-FI) CH-1/CH-2 connectors (XLR 3-pin) and reference input level selector (SVO-5800/5800P only)
Selects the level (+4 dBm, 0 dBm and –6 dBm) according to the reference output level of the equipment to be connected.

AUDIO IN (NORM/HI-FI) CH-1/CH-2 connectors (XLR 3-pin) and reference input level selector (SVO-5800/5800P only)
Selects the level (+4 dBm, 0 dBm and –6 dBm) according to the reference output level of the equipment to be connected.

Reference output level selector
Selects the level (+4 dBm, 0 dBm and –6 dBm) acoording to the reference input level of the equipment to be connected.

AUDIO OUT (NORM/HI-FI) CH-1/CH-2 connectors (XLR 3-pin)

AUDIO OUT (HI-FI) CH-1/CH-2 connectors (XLR 3-pin)

Note

There is a 600-ohm termination switch for the AUDIO IN connectors (NORM/Hi-Fi, Hi-Fi) on the circuitboard inside the unit. The factory default setting of this switch is 600-ohm termination. Contact your Sony dealer for the setting.

Precautions

Safety Precautions

Power supply

- Connect the unit to a power supply of the correct rating.
- Do not drop or place heavy objects on the power cord. If the power cord is damaged, turn off the power immediately. It is dangerous to use the unit with a damaged power cord.
- Disconnect the power cord from the AC outlet by grasping the plug, not by pulling the cord.

Do not open the cabinet

Opening the cabinet may damage precision components or result in electric shock.

Keep foreign objects out of the cabinet

Dropping flammable or metal objects into the cabinet, or spilling liquids near the unit can result in serious accidents.

In case of trouble

If you notice an unusual sound, smell or smoke, turn off the power immediately, disconnect the power supply and contact your Sony dealer.

Handling Precautions

Location

Do not store or use the unit under any of the following conditions:

- In excessive heat or cold (permissible temperature range: 5°C to 40°C (41°F to 104°F))
- In direct sunlight or near heaters. Remember that the temperature inside a locked automobile in summer can rise as high as 50°C (122°F).
- In damp or dusty locations
- In locations subject to vibration
- Near strong magnetic fields
- Near television or equipment generating strong radio frequency energy

Orientation

This unit is designed to be operated horizontally. Never operate the unit vertically or incline it more than 20 degrees.

Precautions

Protect the unit from impact

Do not drop the unit or subject it to severe shocks.

Keep the unit well ventilated

To prevent the temperature from rising inside the unit, keep the unit uncovered and well ventilated while it is operating.

Maintenance

Clean the cabinet and panels by wiping with a soft, dry cloth. For stubborn stains, moisten the cloth with a small amount of neutral solvent, and finish by wiping with a dry cloth. Do not use alcohol, benzine, thinners or volatile liquids, as these may discolor or damage the cabinet surface.

Transporting

- Remove any cassette from the cassette compartment.
- Protect the unit from impact by transporting it in its original carton or a protective case.

Handling Cassettes

Compatible Cassettes

Use S-VHS or VHS cassettes with the unit. The type numbers of cassettes indicate recording/playback times (minutes).

Types of cassettes	Type number
S-VHS cassettes	MQST-30/60/120 (for SVO-5800/SVP-5600) MQSE-30/60/120 (for SVO-5800P/SVP-5600P)
VHS cassettes (high grade tape)	T-30VHG/60VHG/100VHG/120VHG/140VHG/160VHG (for SVO-5800/SVP-5600) E-30PM/60PM/120PM (for SVO-5800P/SVP-5600P)
VHS cassettes (standard tape)	T-30V/60V/120V/140V/160V

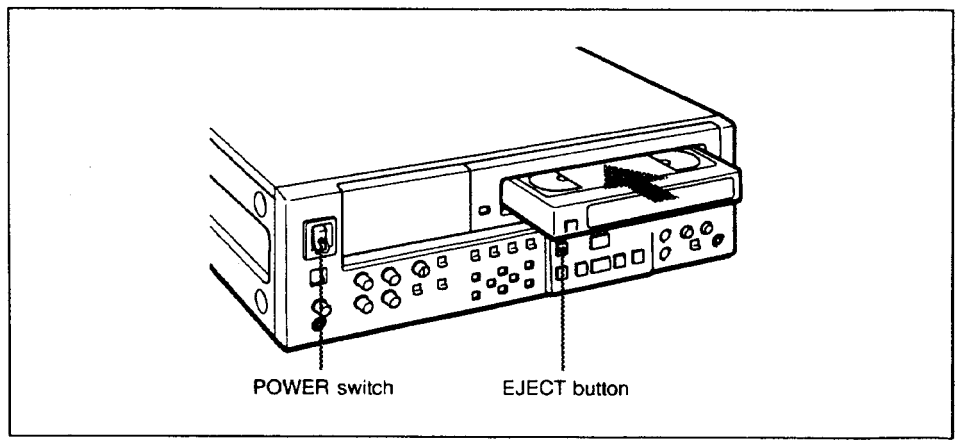
Cassette compatibility

- When you use a VHS cassette, you cannot record a video signal in S-VHS format. In this case, the unit records and plays back in VHS format on the VHS cassette.
- When you use an S-VHS cassette, you can record a video signal either in S-VHS format or VHS format. The unit plays back in the format in which the recording was made. This unit can select the recording format in the menu.

Inserting and Ejecting a Cassette

Note

Insert the cassette while the power of the unit is turned on.



Inserting and ejecting a cassette

(continued)

Inserting a cassette

1 Set the POWER switch to ON.

2 Insert the cassette with its label side up.
The cassette is automatically pulled into the operating position.

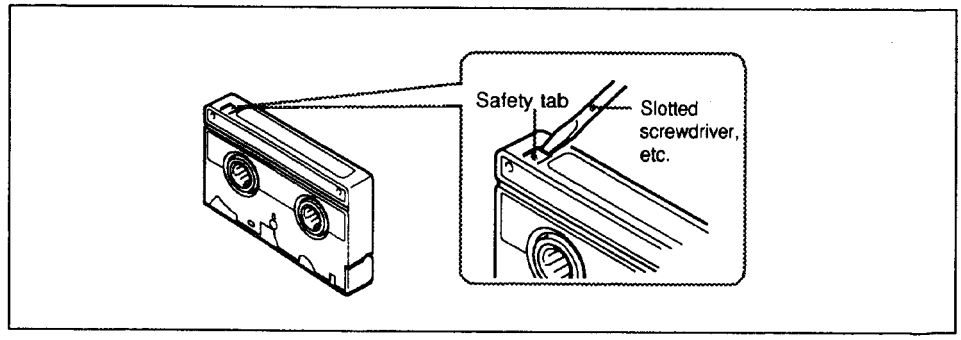
Ejecting a cassette

1 Make sure that the POWER switch is set to ON.

2 Press the EJECT button.

Preventing Accidental Erasure

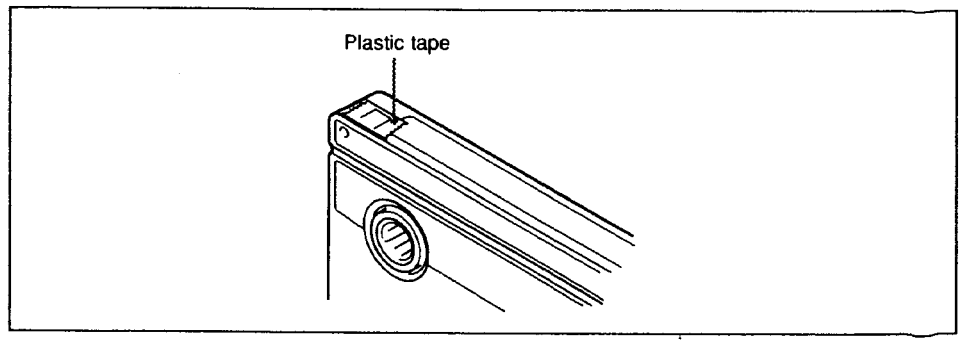
When re-recording on a previously recorded tape, previous recording is automatically erased. To avoid unintentional erasure of recorded signals, break off the safety tab on the cassette. With the tab removed, recording is inhibited.



Preventing accidental erasure

To cancel recording inhibition

Cover the slot left by the safety tab with plastic tape. Placing two layers of tape makes it more secure.

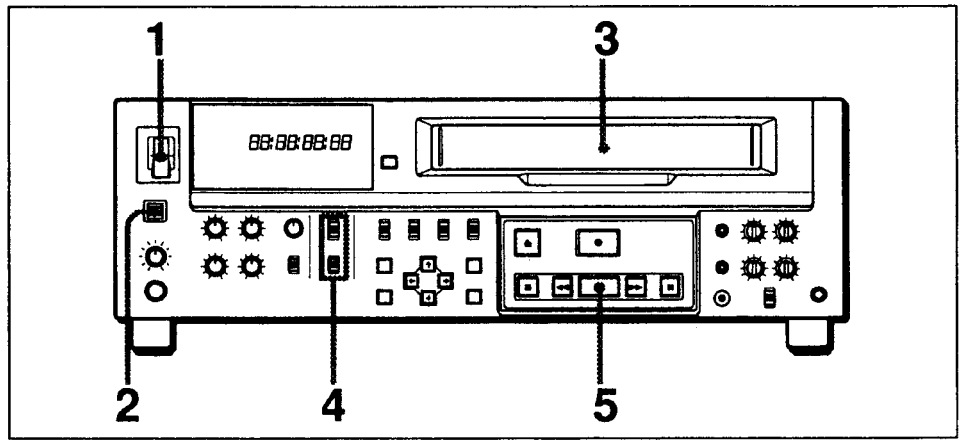


To cancel recording inhibition

Playback

This section describes the basic operating procedures for playback, using the front panel of the unit.

Basic Playback Operations



Basic playback operations

1 Set the POWER switch to ON.

2 Set the REMOTE/LOCAL switch to LOCAL.
It enables you to operate the unit using the controls on the front panel.

3 Insert a cassette into the cassette compartment.

4 Use the MONITOR OUT selectors (METER switch and CH-1/MIX/CH-2 selector) to select the sound to be monitored during playback.
The selected sound is output from the HEADPHONES connector and the MONITOR AUDIO connector on the rear panel.
When the selector is set to the MIX position, stereo sound is output through the HEADPHONES connector, and the mixed sound of channel 1 and channel 2 through the MONITOR AUDIO connector.

Sound to be monitored	METER switch setting	Channel to be monitored	CH-1/MIX/CH-2 selector setting
Hi-fi recording sound	Hi-Fi	Channel 1	CH-1
		Channel 1 and channel 2	MIX
		Channel 2	CH-2
Normal recording sound	NORM	Channel 1	CH-1
		Channel 1 and channel 2	MIX
		Channel 2	CH-2

(continued)

5 Press the PLAY button.
The unit starts playing back.
At tape end, the unit automatically rewinds the tape and stops.

To stop the tape momentarily	Press the PAUSE button.
To stop playback	Press the STOP button.
To rewind the tape	Press the REW button.
To fast forward the tape	Press the F FWD button.
To rewind the tape while watching the picture	Keep pressing the REW button during playback.
To fast forward the tape while watching the picture	Keep pressing the F FWD button during playback.

Notes on audio output

- When the NORMAL CH-2 item of the AUDIO CONTROL menu is set to TIME CODE, the sound recorded in channel 2 of the normal audio track cannot be output or monitored even if you play back a tape on which the sound is recorded in channel 2 .
- When the NORMAL CH-2 item of the AUDIO CONTROL menu is set to AUDIO, time code noise is output through the audio output and monitor output of channel 2 of the normal audio track if you play back a tape on which time code (LTC) is recorded in channel 2. In this case, the time code cannot be used.

For the AUDIO CONTROL menu, see page 49(E).

Settings Using the Menu

You can set the following settings relative to playback using the menu. For details, see the section "Changing the Settings of the Unit – Set-up Menu" in "Advanced Operation" *(page 43(E))*.

When playing back a tape recorded using the Dolby NR system

Set the DOLBY NR item in the AUDIO CONTROL menu to ON *(page 49(E))*. Set it to OFF when playing back a tape recorded without using the Dolby NR system.

Setting the playback pause time

If the playback pause is held for 5 minutes, the pause mode is cancelled, and the tape is step-fed for about 1 second at 1/5 speed to protect the tape and video heads. You can change the pause time and tape operation after pause cancel with the STILL TIMER item and PROTECT MODE item of the TAPE PROTECTION menu *(page 49(E))*.

If Snow or Streaks Appear on the Picture — Tracking Adjustment

If the unit is used to play back a signal recorded with another VTR, noise, snow or streaks may appear because of a tracking error. In this case, make the following adjustments.

1 Set the CH-2 METER switch to TRACKING.

2 Slowly turn the TRACKING control until the maximum level is obtained on the TRACKING CH-2 meter.

Notes

- After playing back the tape, reset the TRACKING control to FIXED. It resumes standard tracking.
- Incorrect tracking may cause noise and vertical fluctuation in the pause mode. In this case, play back the tape and adjust tracking.

Superimposing the Text on the Monitor Screen

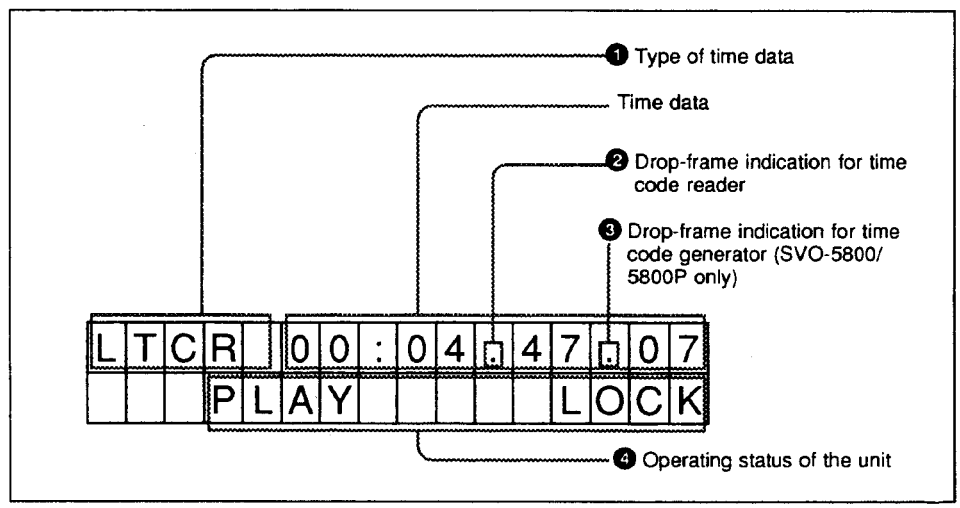
You can superimpose the time data, operating status of the unit, etc. on the screen of the video monitor connected to the MONITOR VIDEO connector on the rear panel.

Superimposed text information

On/off of superimpose, information displayed, and character type and position can be selected by using the DISPLAY CONTROL menu. The factory default settings are as follows:

Superimpose: ON
Information displayed: Time data selected by the CTL/TC/U-BIT (time counter display) selector, and the operating status of the unit
Character type: White characters on a black background
Character position: Bottom center of the screen

For details of the settings, see the DISPLAY CONTROL menu (page 45(E)).


❶ Type of time data
Time data
❷ Drop-frame indication for time code reader
❸ Drop-frame indication for time code generator (SVO-5800/ 5800P only)
LTCR 00:04:47:07
PLAY LOCK
❹ Operating status of the unit

Example of display information

❶ Type of time data

This indicates the type of time data as follows.

Indication	Meaning
CTL	CTL counter data
LTCR/VTCR	Time code reader data
LUBR/VUBR	User bit data of time code reader
TCG	Time code data from time code generator (SVO-5800/5800P only)
UBG	User bit data from time code generator (SVO-5800/5800P only)
LT*R VT*R	Time code data from time code reader Interpolated by the time code reader to make up for the time code data not correctly read from the tape.
LU*R VU*R	User bit data from time code reader The last data is retained by the time code reader, as the new data has not been read correctly from the tape.

❷ Drop-frame indication for time code reader

" . " : Drop-frame mode
" : " : Non-drop-frame mode

❸ Drop-frame indication for time code generator (SVO-5800/5800P only)

" . " : Drop-frame mode
" : " : Non-drop-frame mode

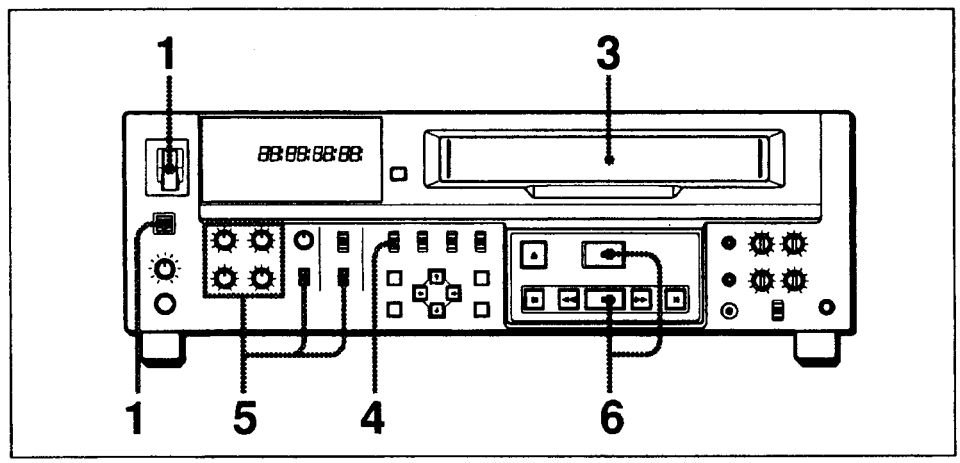
❹ Operating status of the unit

Indication	Operating status
THREADING	Cassette is inserted, and tape is being threaded.
UNTHREADING	Tape is being unthreaded to eject cassette.
CASSETTE OUT	No cassette is inserted.
T. RELEASE	Tape tension is released.
STOP	Tape is stopped.
F. FWD	Fast forward
REW	Rewind
PREROLL	Preroll
PLAY	Play (servo not locked)
PLAY LOCK	Play (servo locked)
PLAY-PAUSE	Playback pause
REC	Recording (servo not locked)
REC LOCK	Recording (servo locked)
REC-PAUSE	Recording pause
EDIT	Edit mode (servo not locked)
EDIT LOCK	Edit mode (servo locked)
JOG STILL	Still picture in jog mode
JOG FWD	Jog mode in forward direction (▶ indicator lights)
JOG REV	Job mode in reverse direction (◀ indicator lights)
SHUTTLE (speed)	Shuttle mode (playback speed)
PAUSE	Shuttle mode playback pause

Recording (SVO-5800/5800P only)

This section describes the basic recording operations using the front panel of the unit.
Please note that there is a premise that a system is set up and the corresponding audio/video recording method is set for the system. For details of set-up and settings, see the section "Advanced Operation."

Basic Recording Operations



Basic recording operations

1 Set the POWER switch to ON.

2 Set the REMOTE/LOCAL switch to LOCAL.
It enables you to operate the unit using the controls on the front panel.

3 Insert a cassette.
Make sure that the safety tab on the cassette is not broken.

4 Use the VIDEO IN SELECT switch to select the connector to which a video signal is connected.
S VIDEO: When connected to the S VIDEO IN connector.
LINE: When connected to the VIDEO IN connector (BNC type).
BLACK: When recording black burst signal (to make a tape for editing).

5 Adjust the recording level of the audio signal.

1) Input the audio signal.
Set the recording method and input connector of the audio signal in the AUDIO CONTROL menu. See "Selection and settings for the audio input /output" (page 27(E)).

2) Set the CH-2 METER switch to AUDIO.

3) Indicate the audio signal to be adjusted with the MONITOR OUT METER switch on the audio level meter. Adjust it with the AUDIO LEVEL control so that the maximum signal level does not exceed "5" on the indication on the meter.

Audio signal to be adjusted	Setting of MONITOR OUT METER switch	AUDIO LEVEL controls to be used
Hi-fi recording	Hi-Fi	Hi-Fi CH-1 (for channel 1)
		Hi-Fi CH-2 (for channel 2)
Normal recording	NORM	NORM CH-1 (for channel 1)
		NORM CH-2 (for channel 2)

For monitoring the sound during adjustment, see the section below "Monitoring the Sound Being Recorded."

Note

When adjusting an audio signal for normal recording, set the LIMITER in the AUDIO CONTROL menu to OFF *(page 49(E))*.

6 While pressing the REC button, press the PLAY button.
Recording starts.

To stop recording momentarily	Press the PAUSE button. To resume recording, press the PAUSE button again. You can continue recording smoothly without picture disturbance.
To stop recording	Press the STOP button.

Monitoring the Sound Being Recorded

During recording or audio signal level adjustment, the sound to be monitored can be selected with the MONITOR OUT selectors (METER switch and CH-1/MIX/CH-2 selector).
The selected sound is output through the HEADPHONES connector and the MONITOR AUDIO connector on the rear panel. When the selector is set to the MIX position, stereo sound is output through the HEADPHONES connector, and the mixed sound of channel 1 and channel 2, through the MONITOR AUDIO connector.

Sound to be monitored	Setting of METER switch	Channel to be monitored	Setting of CH-1/MIX/CH-2 selector
Hi-fi recording sound	Hi-Fi	Channel 1	CH-1
		Channel 1 and channel 2	MIX
		Channel 2	CH-2
Normal recording sound	NORM	Channel 1	CH-1
		Channel 1 and channel 2	MIX
		Channel 2	CH-2

Settings Using the Menu

You can set the following items relative to recording using the menu. For details, see the section "Changing the Settings of the Unit—Set-up Menu" *(page 43(E))*.

Setting the S-VHS/VHS format

Set the S-VHS REC MODE item of the VIDEO CONTROL menu to AUTO in ordinary use *(page 48(E))*.
When it is set to AUTO or ON, a video signal is recorded in the S-VHS format on S-VHS cassette, and the VHS format on VHS cassette. If AUTO is selected, the S-VHS/VHS format is automatically selected for S-VHS cassette according to the format of the tape previously recorded. If OFF is selected, recording is done in the VHS format on S-VHS cassette.

Setting of S-VHS REC MODE of VIDEO CONTROL menu	Recording format		
	VHS cassette	S-VHS cassette	
		Prerecorded in VHS	Prerecorded in S-VHS
AUTO	VHS	Normal recording: S-VHS Insert/assemble editing: VHS	S-VHS
ON	VHS	S-VHS	S-VHS
OFF	VHS	VHS	VHS

Setting the video recording level

Set the VIDEO AGC item of the VIDEO CONTROL menu to ON in ordinary use *(page 48(E))*. The recording level of the video signal is automatically adjusted during recording.

Sound output to external equipment

Normal or hi-fi sound selected with the LINE OUT item of the AUDIO CONTROL menu is output through the AUDIO OUT (NORM/Hi-Fi) connector *(page 49(E))*. Hi-fi sound is always output through the AUDIO OUT (Hi-Fi) connector.

Setting the recording pause time

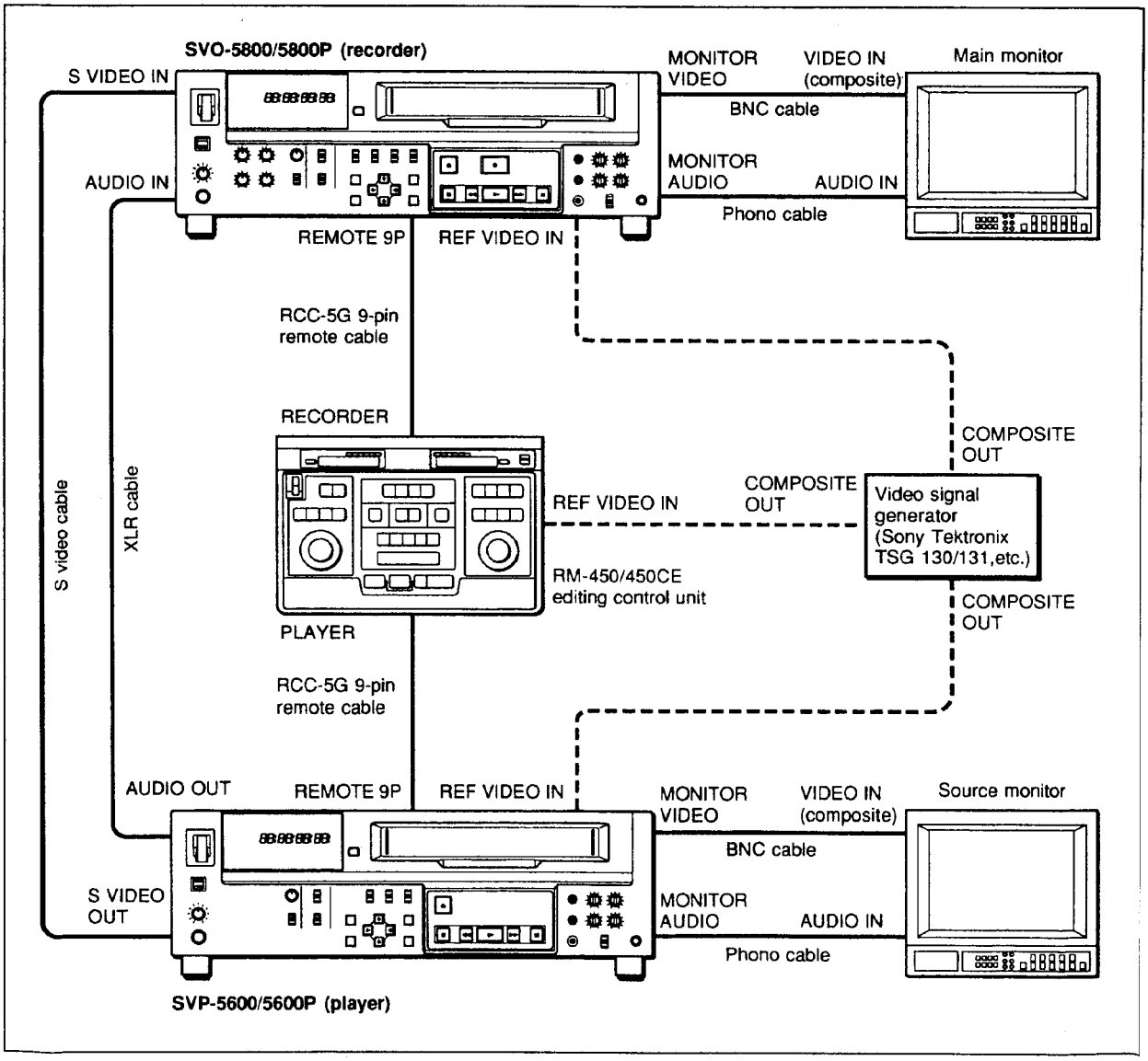
If the recording pause is held for about 5 minutes, the recording pause mode is cancelled and shifts to playback pause mode, and the tape is step-fed for about 1 second at 1/5 speed to protect the tape and video heads.
You can change the recording pause time and tape operation after recording pause cancel with the STILL TIMER item and PROTECT MODE item of the TAPE PROTECTION menu *(page 49(E))*.

Using the Unit in a System

Connecting a Player and a Recorder
— Sample Connection for Cut Editing System

The figure below shows a system for cut editing using the SVO-5800/5800P (recorder) and SVP-5600/5600P (player).

Connect the reference video signal to each piece of equipment for high precision editing (page 25(E)).
For the connections of video and audio signals and settings of the unit, see pages 26(E) and 27(E).
For details on editing operations, refer to the operation manual for the editing control unit.
For details on the connections and settings of each piece of equipment, refer to the respective operation manuals.



Sample connection for cut editing system

Settings of SVO-5800/5800P (recorder) and SVP-5600/5600P (player)

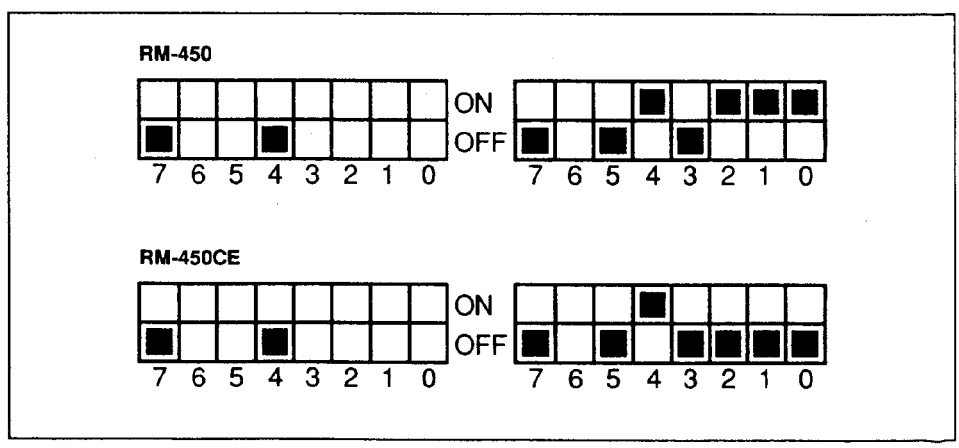
Switches/selectors or menu		Settings
Front panel	REMOTE/LOCAL switch	REMOTE
	VIDEO IN SELECT switch (SVO-5800/5800P only)	S-VIDEO
	BYPASS/LOCAL/REMOTE selector	LOCAL[a]
Rear panel	AUDIO IN reference input level selector	+4dBm
	AUDIO OUT reference output level selector	+4dBm
	REF VIDEO IN 75-ohm termination switch	ON[b]
Set-up menu	EDIT MODE item of VIDEO CONTROL menu	ON
	Change the settings of VIDEO CONTROL, AUDIO CONTROL and TIME CODE menus as necessary.	

a) When it is set to LOCAL, you can use the controls and screws in the TBC CONTROL block on the front panel. Set it to REMOTE when using an external TBC controller.

b) As the REF VIDEO IN connectors of the SVO-5800/5800P/SVP-5600/5600P are loop-through, the output of the signal generator can be bridge connected via each piece of equipment. Set the 75-ohm termination switch to OFF for bridge connection. Set it to ON when bridge connection is not made or this unit is the terminal equipment in the bridge connection.

Setting of the RM-450/450CE editing control unit

- Set the preroll time of the RM-450 for 5 seconds/RM-450CE for 7seconds.
- When connection is complete, insert recorded tapes into both the SVO-5800/5800P and SVP-5600/5600P and press the LEARN button on the RM-450/450CE for automatic measurement of pinch on delay time between the SVO-5800/5800P and SVP-5600/5600P.
- For higher precision editing, connect a reference video signal to each VTR and RM-450/450CE.
- Set the SYSTEM PRESET switch of the RM-450/450CE as follows:

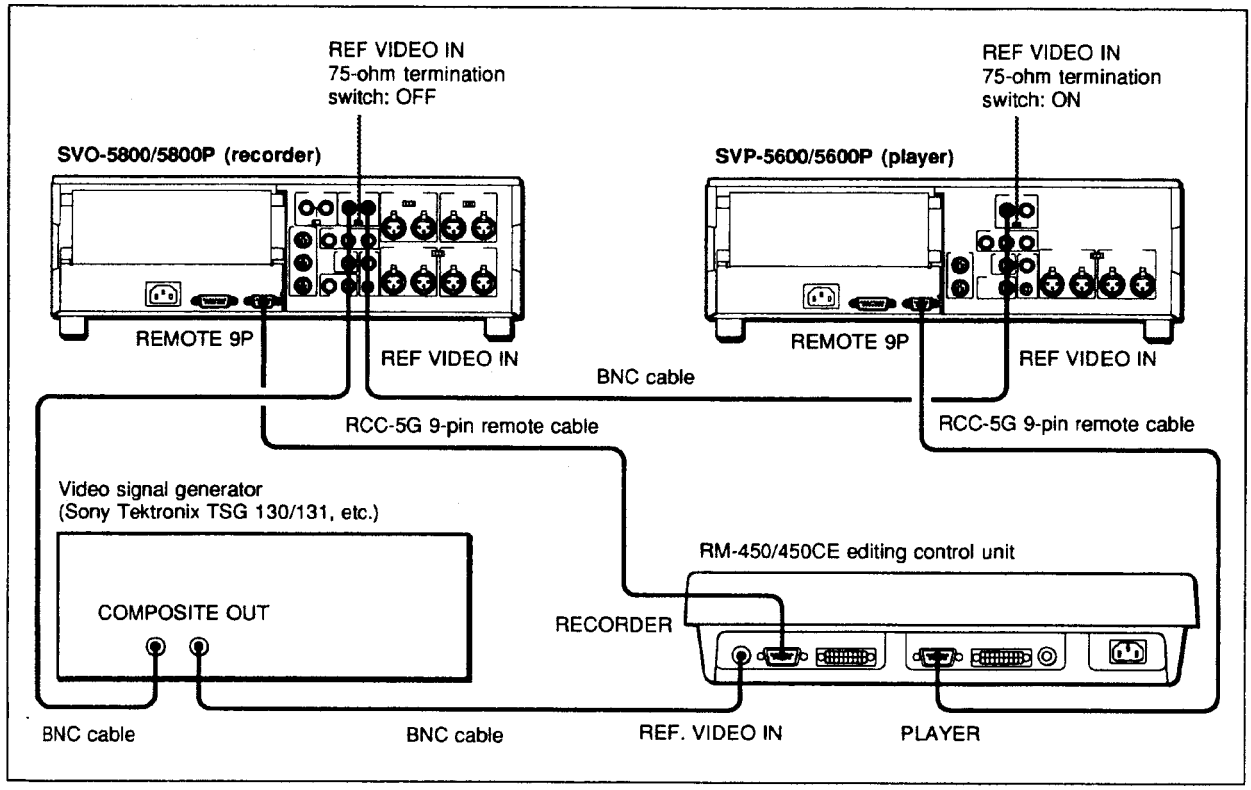


Setting the SYSTEM PRESET switch of RM-450/450CE

Note

The ROM should be changed for some RM-450CE versions depending on the serial number. Consult your Sony service representative for changing the ROM.

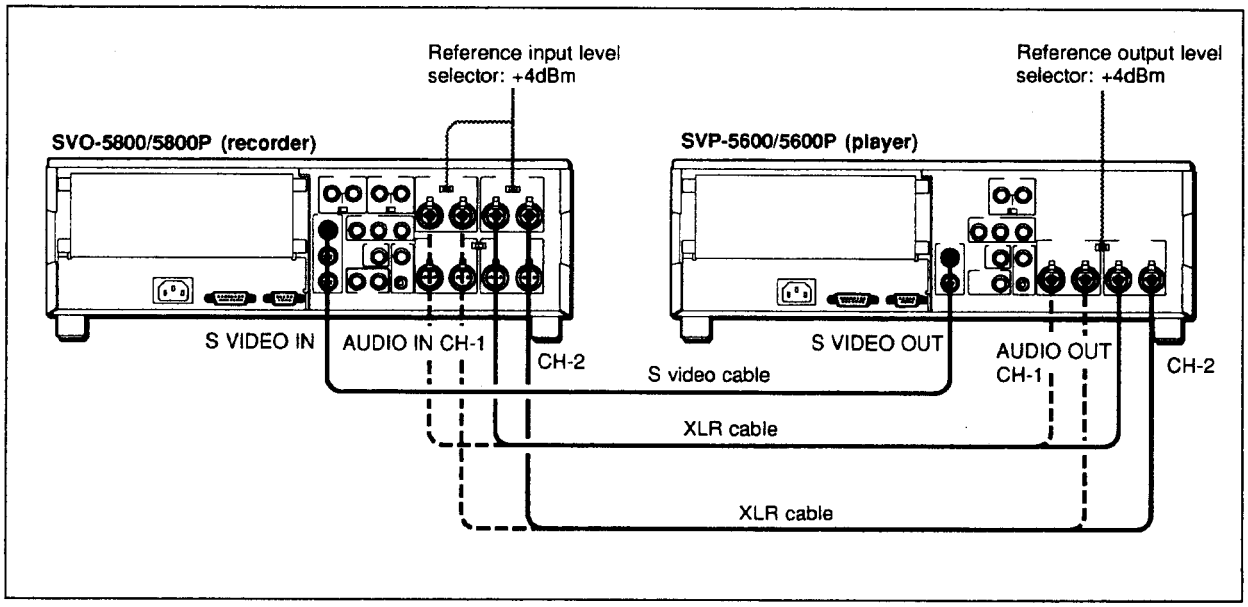
Connection of reference video signal and editing control unit – For higher precision editing



Connection of reference video signal and editing control unit

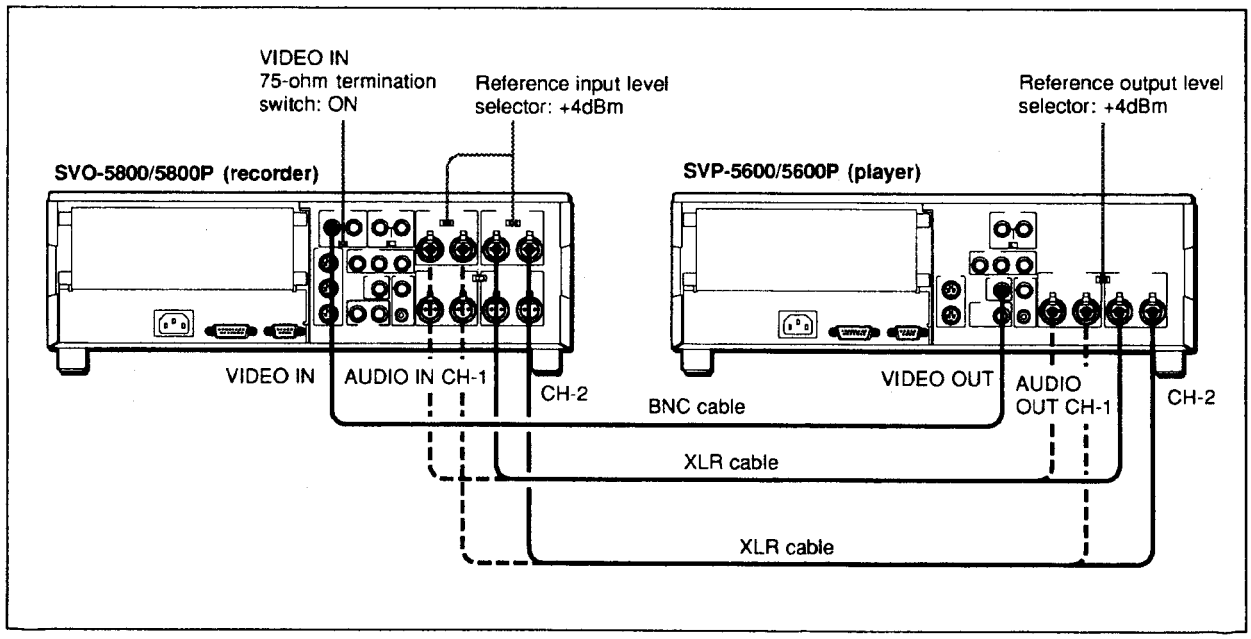
Connection of audio/video signal

Using S video cable



Connection of audio/video signal using S video cable

Using BNC cable



Connection of audio/video signal using BNC cable

Use the appropriate AUDIO IN/AUDIO OUT connectors according to the audio signals to be edited, and change the settings of the set-up menu as necessary. See "Selection and settings for the audio input/output" on page 27(E).

Selection and settings for the audio input/output

Settings of SVO-5800/5800P (recorder)

Use of the audio input signal	Setting of HI-FI REC SEL item of AUDIO CONTROL menu	Audio signals to be input
To record separate audio signals on the hi-fi audio tracks and normal audio tracks	HI-FI INPUT	Input the audio signals for hi-fi recording to AUDIO IN (Hi-Fi) connectors. Input the audio signals for normal audio recording to AUDIO IN (NORM/Hi-Fi) connectors.
To record the same audio signals on the hi-fi audio tracks and normal audio tracks	NORMAL INPUT	Input the audio signals to be recorded to AUDIO IN (NORM/Hi-Fi) connectors. (The audio signals input to AUDIO IN (Hi-Fi) connectors cannot be recorded.)

For hi-fi recording

Set the HI-FI REC item of the AUDIO CONTROL menu to ON for hi-fi recording *(page 49(E))*.

For normal recording

- Set the HI-FI REC item of the AUDIO CONTROL menu to OFF for normal recording *(page 49(E))*.
- Select the audio signal (or time data) for normal recording with the NORMAL CH-2 item and NORMAL CH-1 REC item of the AUDIO CONTROL menu *(page 49(E))*.
- Set the LIMITER item of the AUDIO CONTROL menu to ON to activate the limiter circuit. This eliminates overload in the input signal for recording with little distortion *(page 49(E))*.
- Set the DOLBY NR item of the AUDIO CONTROL menu to ON to reduce the tape noise in a high frequency range *(page 49(E))*.

Note

When the NORMAL CH-2 item of the AUDIO CONTROL menu is set to TIME CODE, normal sound cannot be recorded or monitored. If you record in this position, time code is recorded in channel 2 of the normal audio track.

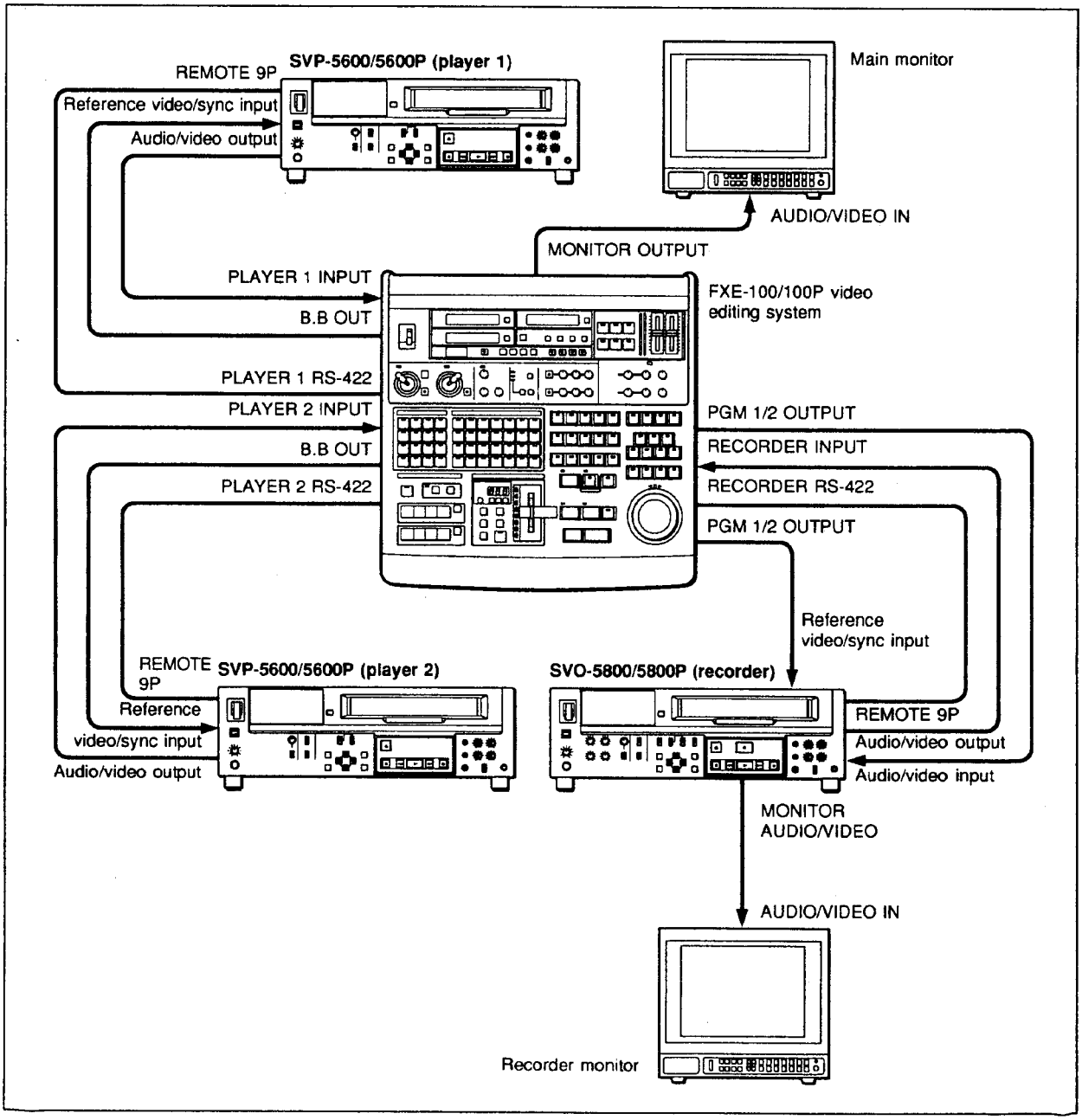
Settings of SVP-5600/5600P (player)

Use of the audio output signal	Setting of LINE OUT item of AUDIO CONTROL menu	Audio output signals
To output the recorded hi-fi audio signals and normal audio signals separately	NORMAL	The recorded hi-fi audio signals are output from AUDIO OUT (Hi-Fi) connectors. The recorded normal audio signals are output from AUDIO OUT (NORM/Hi-Fi) connectors.
To output the recorded hi-fi audio signals only	HI-FI	The recorded hi-fi audio signals are output from both AUDIO OUT (NORM/Hi-Fi) and AUDIO OUT (Hi-Fi) connectors.

Connecting Two Players and a Recorder
— Sample Connection for A/B Roll Editing System

The figure below shows a system for A/B roll editing using one SVO-5800/5800P (recorder) and two SVP-5600/5600P (player) units. In this system, the playback pictures of the two players can be edited with effects such as mixing and wipe.

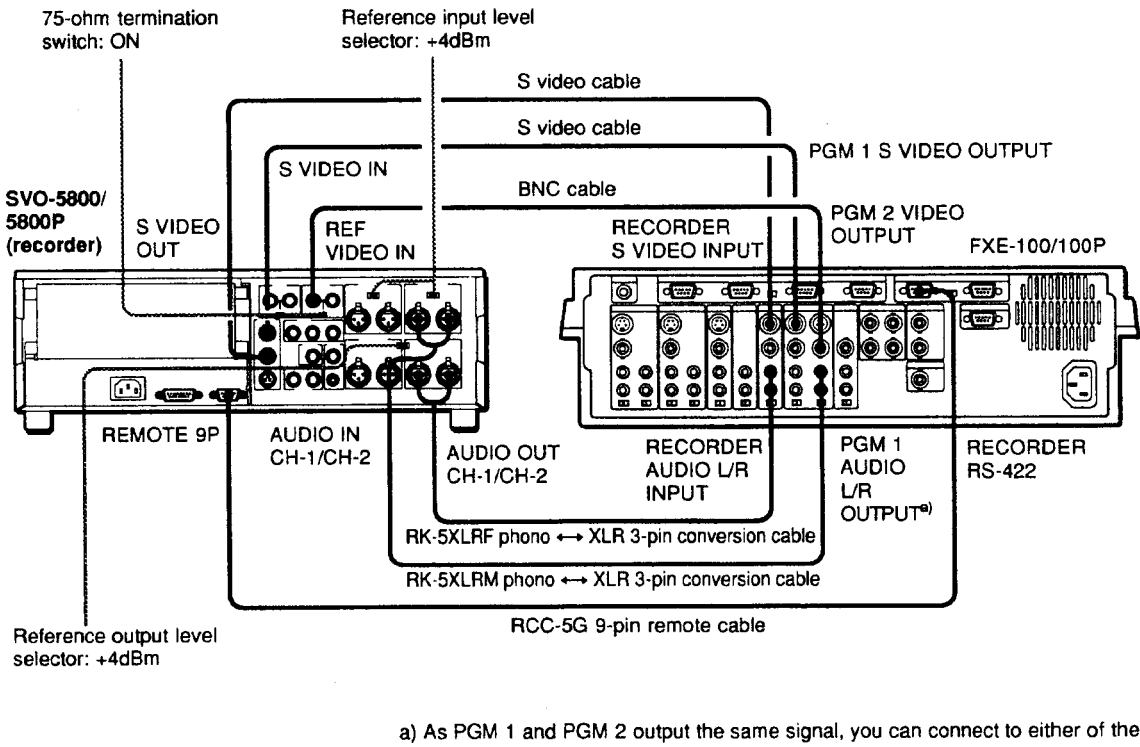
For details on the connection of SVO-5800/5800P and FXE-100/100P, and SVP-5600/5600P and FXE-100/100P, see pages 29(E) and 30(E).
For the settings of the switches and menus of SVO-5800/5800P, SVP-5600/5600P and FXE-100/100P, see page 31(E).
For details on editing operations, refer to the operation manual for the editing control unit.



Sample connection for A/B roll editing system

Connection of SVO-5800/5800P (recorder) and FXE-100/100P

When you have just one player, connect the audio/video output connector of the recorder to the RECORDER INPUT connector of the FXE-100/100P video editing system. A freeze image of the recorder can be taken into the FXE-100/100P in A roll editing, and mixing or wipe is possible with the player's image. Also, you can check the playback signal of the tape in the recorder (master tape) on the main monitor.


75-ohm termination switch: ON
Reference input level selector: +4dBm
S video cable
S video cable
PGM 1 S VIDEO OUTPUT
S VIDEO IN
BNC cable
SVO-5800/ 5800P (recorder)
S VIDEO OUT
REF VIDEO IN
RECORDER S VIDEO INPUT
PGM 2 VIDEO OUTPUT
FXE-100/100P
REMOTE 9P
AUDIO IN CH-1/CH-2
AUDIO OUT CH-1/CH-2
RECORDER AUDIO L/R INPUT
PGM 1 AUDIO L/R OUTPUT a)
RECORDER RS-422
RK-5XLRF phono ⟷ XLR 3-pin conversion cable
RK-5XLRM phono ⟷ XLR 3-pin conversion cable
RCC-5G 9-pin remote cable
Reference output level selector: +4dBm
a) As PGM 1 and PGM 2 output the same signal, you can connect to either of them.

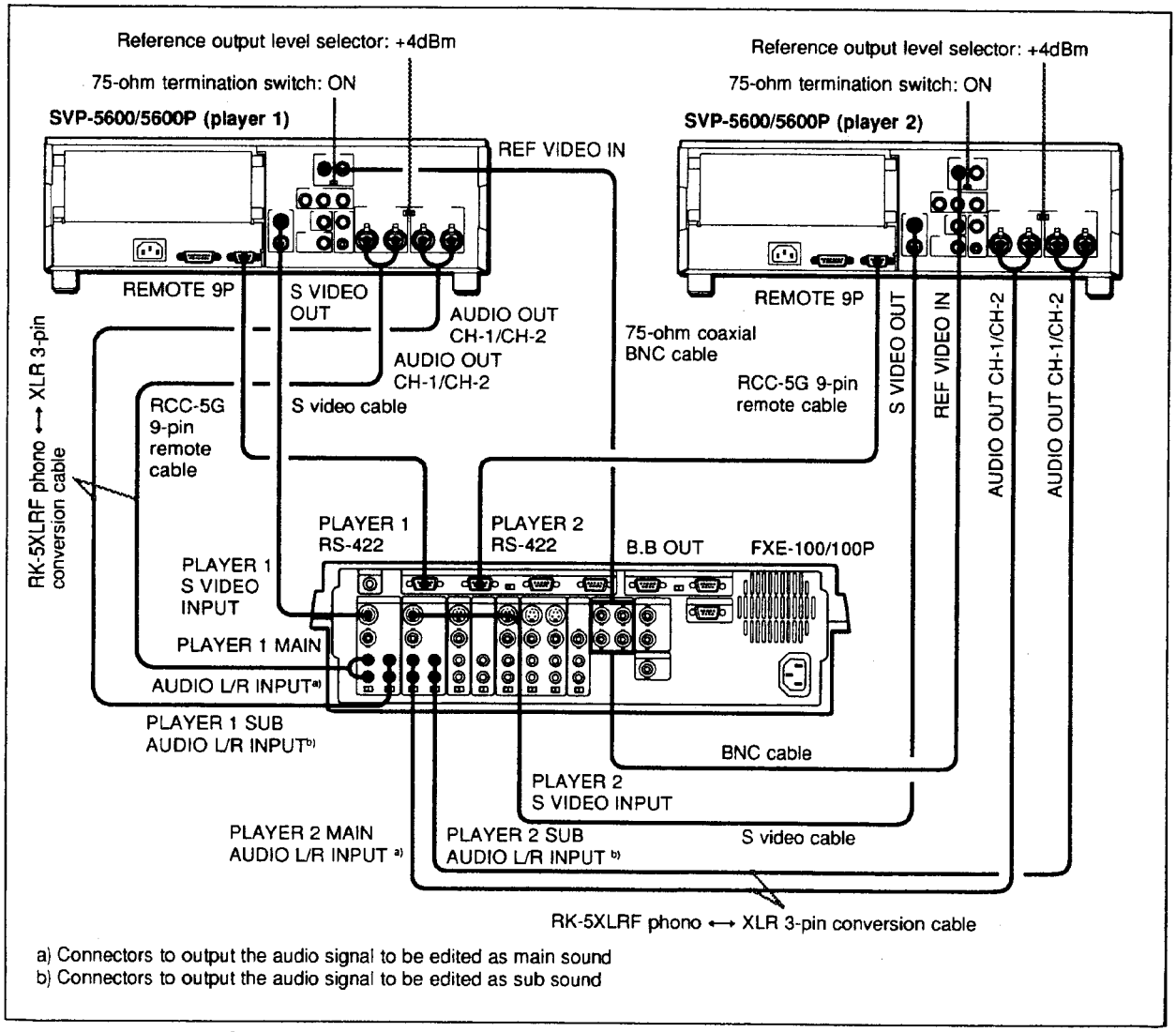
Connection of SVO-5800/5800P (recorder) and FXE-100/100P

Notes

- To the REF VIDEO IN connector of the recorder, input the output signal from the PGM 1/2 VIDEO OUTPUT connector, not from B.B OUT of FXE-100/100P.
- As the REF VIDEO IN connector of the SVO-5800/5800P/SVP-5600/5600P is loop-through, the output of the signal generator can be bridge connected via each piece of equipment. Set the 75-ohm termination switch to OFF for bridge connection. Set it to ON when bridge connection is not made or the unit is the terminal equipment in the bridge connection.

Connection of two SVP-5600/5600P units (player 1 and player 2) and FXE-100/100P

Connect two players for A/B roll editing.


Reference output level selector: +4dBm
75-ohm termination switch: ON
SVP-5600/5600P (player 1)
REF VIDEO IN
REMOTE 9P
S VIDEO OUT
AUDIO OUT CH-1/CH-2
AUDIO OUT CH-1/CH-2
S video cable
RCC-5G 9-pin remote cable
RK-5XLRF phono ⟷ XLR 3-pin conversion cable
Reference output level selector: +4dBm
75-ohm termination switch: ON
SVP-5600/5600P (player 2)
REMOTE 9P
75-ohm coaxial BNC cable
RCC-5G 9-pin remote cable
S VIDEO OUT
REF VIDEO IN
AUDIO OUT CH-1/CH-2
AUDIO OUT CH-1/CH-2
PLAYER 1 RS-422
PLAYER 2 RS-422
B.B OUT
FXE-100/100P
PLAYER 1 S VIDEO INPUT
PLAYER 1 MAIN
AUDIO L/R INPUT a)
PLAYER 1 SUB AUDIO L/R INPUT b)
BNC cable
PLAYER 2 S VIDEO INPUT
PLAYER 2 MAIN AUDIO L/R INPUT a)
PLAYER 2 SUB AUDIO L/R INPUT b)
S video cable
RK-5XLRF phono ⟷ XLR 3-pin conversion cable
a) Connectors to output the audio signal to be edited as main sound
b) Connectors to output the audio signal to be edited as sub sound

Connection of two SVP-5600/5600P units (player 1 and player 2) and FXE-100/100P

Setting of FXE-100/100P video editing system

Setting of switches/selectors on the rear panel

AUDIO INPUT 600-ohm ON/OFF switch: ON
AUDIO PGM OUTPUT level selector: +4dB

Setting of set-up menu

101 VIDEO INPUT SELECT menu: S-V (S video signal)
102 PREROLL TIME menu: 5 SEC (5 seconds) (FXE-100)
7 SEC (7 seconds) (FXE-100P)

When using an editing control unit other than the FXE-100/100P

Set the editing control unit as follows:
Edit timing: 7 frames (NTSC)/8 frames (PAL)
Recommended preroll time: 5 seconds (NTSC)/7 seconds (PAL)

Settings of SVO-5800/5800P (recorder) and SVP-5600/5600P (player)

Setting of selectors/switches on the front panel

Switches/selectors	Settings	Remarks
REMOTE/LOCAL switch	REMOTE	Always in this position
INT/EXT switch (SVO-5800/5800P only)	INT	Always in this position
VIDEO IN SELECT switch (SVO-5800/5800P only)	S VIDEO	Always in this position when using S video cable
CTL/TC/U-BIT selector	—	Basically, follow the editing control unit.
LTC/AUTO/VITC selector	LTC	When editing with a reference of LTC
	AUTO	When editing a tape with LTC and VITC. However, if the values differ for LTC and VITC, do not set to this position.
	VITC	When editing with a reference of VITC
BYPASS/LOCAL/REMOTE selector	LOCAL	When using the controls and screws in TBC CONTROL on the front panel
Other switches/selectors	Set them as necessary.	

Setting of set-up menu

Menu	Items	Settings	Remarks
TIME CODE menu	RUN MODE (SVO-5800/5800P only)	FREE RUN (factory default)	Always set to this.
	VITC REC MODE (SVO-5800/5800P only)	OFF (factory default)	Set to this when VITC is not recorded.
		ON	Set to this when recording VITC.
	INT TC MODE (SVO-5800/5800P only)	PRESET (factory default)	Set to this.
VIDEO CONTROL menu	EDIT MODE	ON	Set to this for better picture quality.
AUDIO CONTROL menu	NORMAL CH-2	AUDIO (factory default)	Set to this when using 2 channels in NORMAL AUDIO.
		TIME CODE	Set to this when using LTC.
OPERATIONAL FUNCTION menu	AUTO EE SELECT (SVO-5800/5800P only)	PB	Set to this when using A-roll editing.
Other menus	Set them as necessary.		

Selection and settings for the audio input/output

Use the appropriate AUDIO IN/AUDIO OUT connectors according to the audio signals to be edited, and change the settings of the set-up menu as necessary.

See "Selection and settings for the audio input/output" on page 27(E).

Selecting a reference signal for the servo systems

This unit automatically selects the reference signal for the servo systems to lock from among the input video signal selected with the VIDEO IN SELECT switch, the external sync signal input from the REF VIDEO IN connector and the internally generated sync signal (or the sync signal from the TBC in some operating modes).
The table below shows the relation between the setting of the SYNC SELECT item of SERVO CONTROL menu (AUTO or EXT) and the reference signal for the servo systems in each operating mode.

Setting of SYNC SELECT item of SERVO CONTROL menu	Signal supplied		Reference signal automatically selected in each operating mode			
	Input video signal	External sync signal	Usually (except editing in the recorder's case) (Always in the player's case)		Editing/preview (recorder)	
			Playback	EE mode/ recording	Playback	EE mode/ recording
AUTO	O	O	EXT SYNC	VIDEO IN	VIDEO IN	VIDEO IN
	×	O	EXT SYNC	EXT SYNC	EXT SYNC	EXT SYNC
	O	×	INT SYNC	VIDEO IN	VIDEO IN	VIDEO IN
	×	×	INT SYNC	INT SYNC	INT SYNC	INT SYNC
EXT	O	O	EXT SYNC	EXT SYNC	EXT SYNC	EXT SYNC
	×	O	EXT SYNC	EXT SYNC	EXT SYNC	EXT SYNC
	O	×	INT SYNC	VIDEO IN	VIDEO IN	VIDEO IN
	×	×	INT SYNC	INT SYNC	INT SYNC	INT SYNC

O : signal supplied
× : signal not supplied

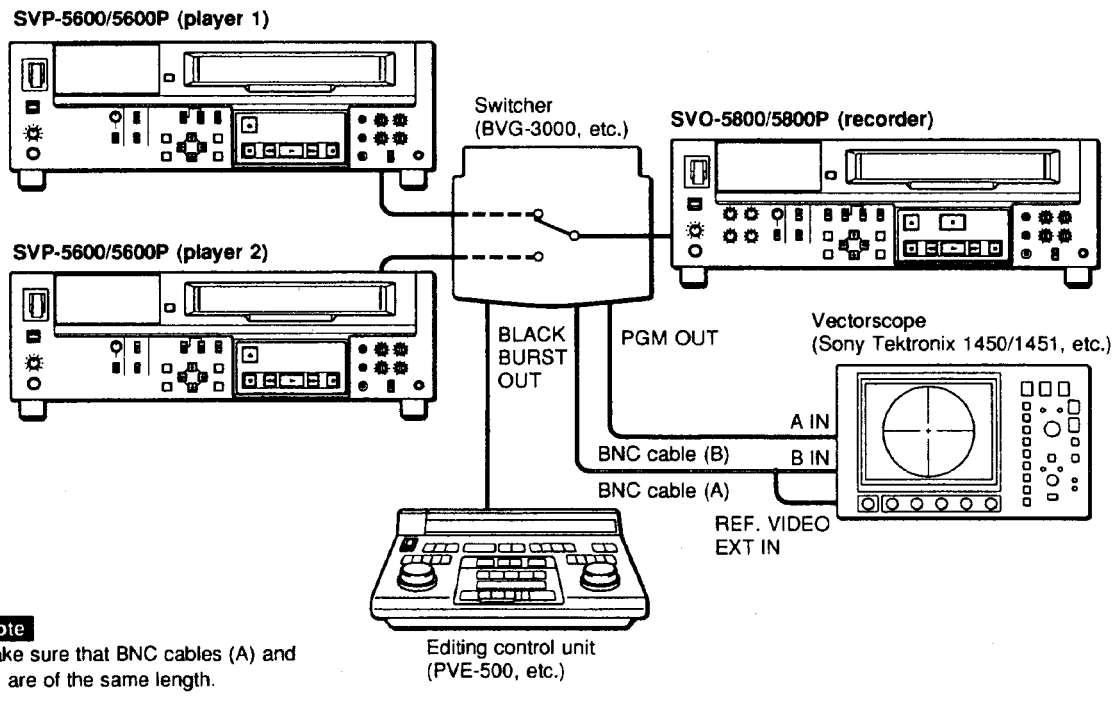
VIDEO IN: Input video signal
EXT SYNC: External sync signal
INT SYNC: Internal sync signal

About the TBC mode

The TBC is usually bypassed when the BYPASS/LOCAL/REMOTE selector on the front panel is set to BYPASS. To obtain the appropriate reference signal for the servo systems during editing, etc, the unit automatically bypasses the TBC even if the selector is set to LOCAL or REMOTE.

Adjustments for Precise Editing – Phase Adjustments

When using two or more players, as in an A/B roll editing system, phase synchronization of the signals (i.e., system sync) is necessary. For composite signals only, the subcarrier phase must also be in synchronization. If not, picture instabilities or color break-up may occur at edit points.
The FXE-100/100P video editing system and a switcher with built-in frame synchronizer, such as the DFS-500/500P, automatically adjust the sync and subcarrier phases. For other switchers, after configurating the editing system, use a vectorscope to adjust the sync and subcarrier phases of the recorder and players. Subcarrier phase adjustment is necessary only when using composite signals.



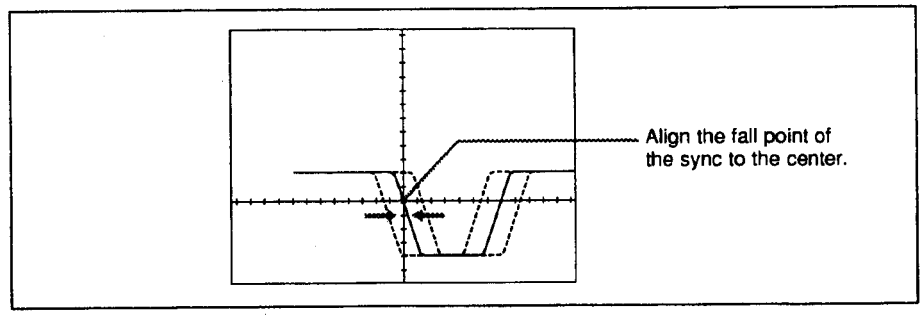
Connections for phase adjustment

Adjusting the Phase

1 Press the WFM button on the vectorscope and set WFM as follows.
The vectorscope enters the WFM mode.
SWEEP: 1 µs (2H/MAG)
FILTER: FLAT
EXT REF: EXT
GAIN: ×1

2 Press the B channel button on the vectorscope.
The black burst signal from the switcher is displayed.

3 Adjust the HORIZ POS control on the vectorscope so that the fall point of the sync of the black burst signal is aligned to the center.

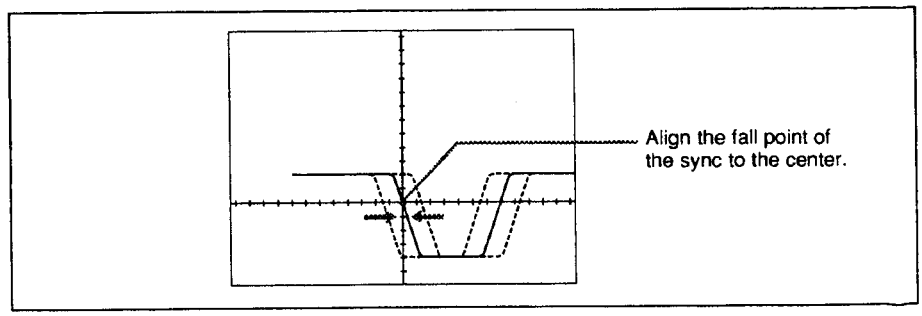


Adjusting the sync of the black burst signal

4 Output the player 1 signal from the editing control unit.

5 Press the A channel button on the vectorscope.
This displays the sync phase of the signal from player 1.

6 Adjust the SYNC PHASE adjustment screw on the front panel of player 1, using a Phillips-head screwdriver, so that the output from player 1 on channel A is in correct phase alignment with the fall point of the sync of the black burst signal on channel B.



Adjusting the sync of the player 1 signal

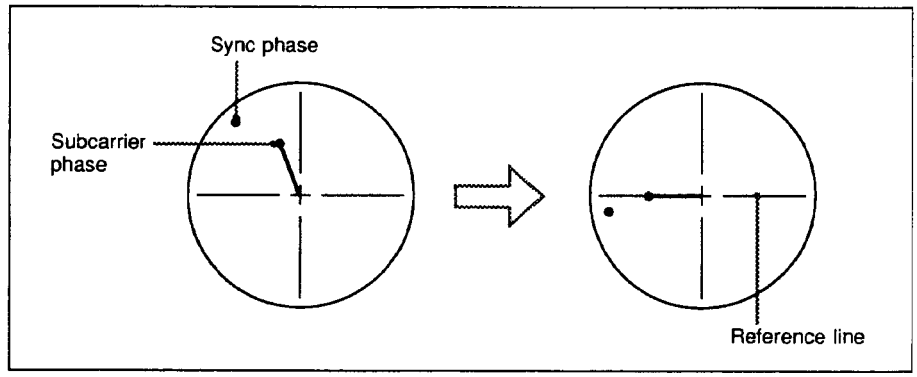
7 Output the player 2 signal from the editing control unit.
Repeat steps 5 and 6 to align the fall point of the sync of the output signal from player 2 to the center.
In this position, adjust the sync and subcarrier phases as follows.

8 Press the SCH button on the vectorscope.
The vectorscope enters the SCH mode.

9 Press the B channel button on the vectorscope.
The black burst signal from the switcher is displayed.

10 Press the EXT button on the vectorscope.
The vectorscope enters the external sync mode.

11 Adjust the phase adjustment control on the vectorscope so that the sync and subcarrier phases of the black burst signal are close to the reference line.



Adjusting the phase of black burst signal

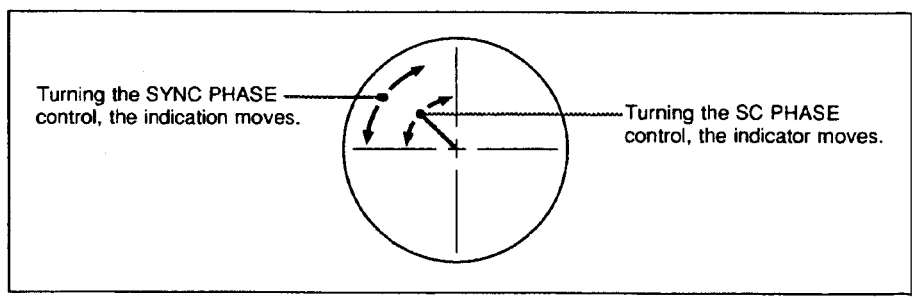
Note

When component signals are used, the subcarrier phase does not appear.

12 Output the player 1 signal from the editing control unit.

13 Press the A channel button on the vectorscope.
The sync phase and the subcarrier phase (composite signals only) of the signal from player 1 are displayed.

14 Adjust the SYNC PHASE and SC PHASE adjustment screws on the front panel of player 1, using a Phillips-head screwdriver, so that the output from player 1 on channel A is in correct phase alignment with the black burst signal on channel B.



Adjusting the phase of player 1 signal

15 Output the player 2 signal from the editing control unit.
Repeat steps 13 and 14 to adjust the sync and subcarrier phases of the signal output from player 2.

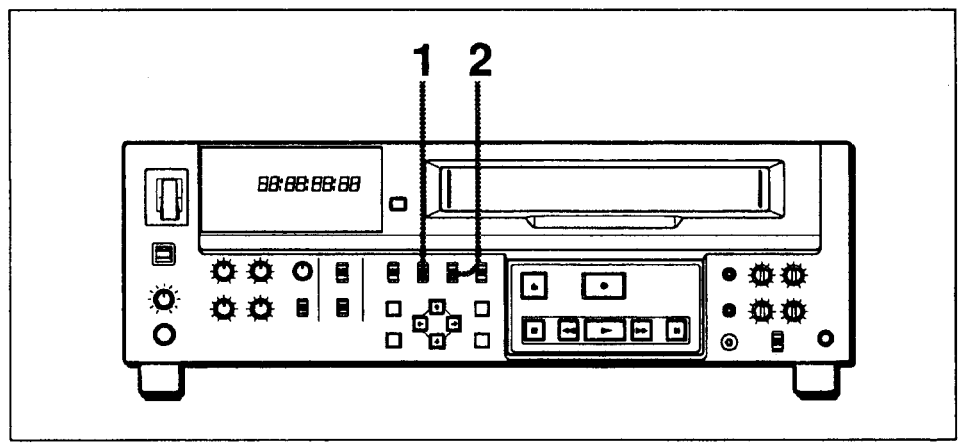
Time Data

The time data used by the SVO-5800/5800P/SVP-5600/5600P include CTL signal[1] count values, LTC[2], VITC[3] and user bit data[4]. This section describes how to display time data, how to preset the initial values, and how to synchronize with the built-in time code generator or the external time code generator.

Displaying Time Data

During recording or playback, you can display the selected time data on the monitor screen and the time counter display on the front panel of the unit.

Selecting the time data to be displayed



Displaying time data

1 Use the time counter display selector to select the data to be displayed.

Switch position	Types of time data
CTL	CTL signal
TC	Time code (LTC or VITC)
U-BIT	User bit data of the selected time code (LTC or VITC)

1) **CTL signal:** Abbreviation for control signal. It is a pulse signal recorded on the tape longitudinally in fields. By counting this signal, the running time of the tape can be learned.
2) **LTC:** Abbreviation for Longitudinal Time Code. It is a time code recorded along the tape (the same direction as the tape runs).
3) **VITC:** Abbreviation for Vertical Interval Time Code. It is a time code inserted into the vertical blanking interval of video signals.
4) **User bit data:** A 32-bit section of the time code. It is reserved for the user to record necessary data, such as year, date, tape I.D. number and program I.D. number.

2 When TC or U-BIT is selected, use the time code selector to select the time code (LTC, AUTO, VITC).
When AUTO is selected, VITC is automatically read and displayed for playback speed within a range of +1/2, and LTC for other speeds.

Resetting the CTL display to "0:00:00:00"

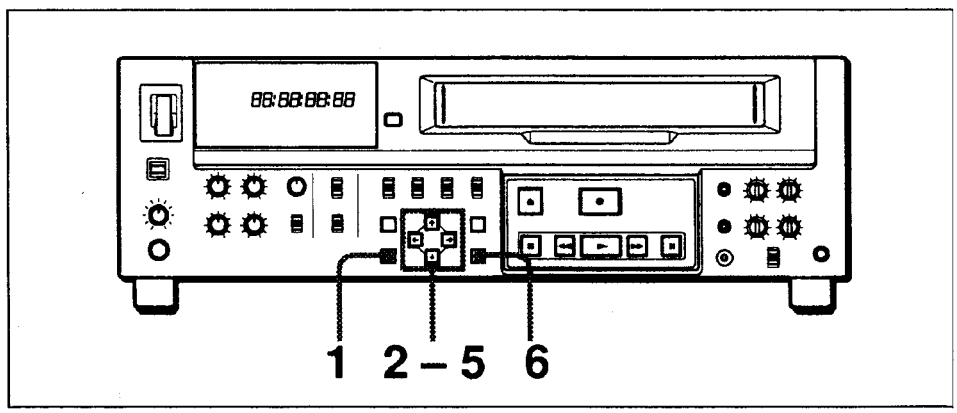
Press the COUNTER RESET button.

Note

When the time data signal output through the MONITOR VIDEO connector is recorded, the superimposed data may slightly differ from the actual time data.

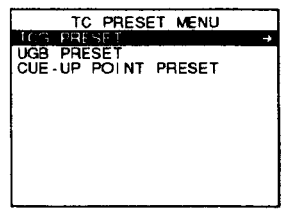
Setting the Time Code and User Bit Initial Values (SVO-5800/5800P only), and Cue-up Point[1)]

The SVO-5800/5800P has a built-in time code generator. Using this built-in time code generator, you can preset the initial values of the time code and user bit to be recorded on the tape. In addition, you can preset the time code of the cue-up point on the SVO-5800/5800P and SVP-5600/5600P. If the time code of the cue-up point is set, the desired scene can be quickly located.



Setting the time code and user bit initial values, and cue-up point

1 Press the TC PRESET button.
The time code preset menu appears on the monitor screen.

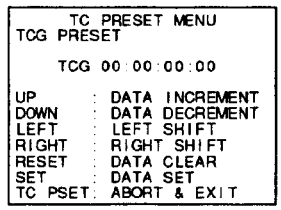


Time code preset menu

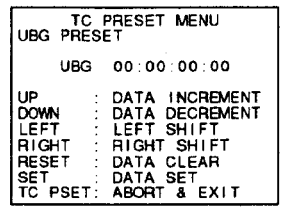
(continued)

1) **Cue-up:** To locate the desired point and pause.

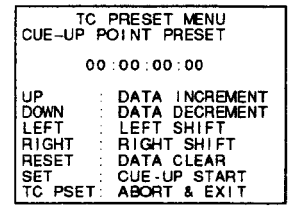
2 Use the ↓ ↑ buttons to select the item, and press the → button.
The preset menu of the selected time data appears on the monitor screen.



TCG PRESET (time code preset) menu



UBG PRESET (user bit preset) menu



CUE-UP POINT PRESET menu

3 Use the ← → buttons to select the digit corresponding to the data to be changed.

4 Use the ↓ ↑ buttons to input the data.
Note that user bit data values are hexadecimal (digits 0-9 and A-F).

5 Repeat steps 3 and 4 to set all the digits.
To reset the value to 00:00:00:00, press the RESET(NO) button.

6 Press the SET(YES) button.

TCG PRESET or UBG PRESET menu:
A display "NOW SAVING..." appears on the monitor screen, and the data is saved in the memory of the unit.
Once the setting is saved, the monitor screen and the time counter display return to normal.

CUE-UP POINT PRESET menu:
Cueing up starts.

Notes

- If you turn off the unit while it is in the process of saving the settings, settings may be lost. Wait until saving is complete before turning the unit off.
- As LTC and VITC use the same generator, you cannot set different values for each of them.

Setting the run mode of the built-in time code generator

The factory default setting of the RUN MODE item of the TIME CODE menu is FREE RUN. The time code generator begins to run from the instant the preset value is saved. Set it to REC RUN when you want the time code generator to run during recording *(page 46(E))*.

Setting the initial value of the time code to the present time

Set the RUN MODE item of the TIME CODE menu to FREE RUN, and set the initial value of the time code to the present time following the procedures on pages 37(E) and 38(E).

Setting the drop-frame mode [1]

The factory default setting of the DF MODE item of the TIME CODE menu is OFF(NDF). The time code generator and the CTL counter operate in non-drop-frame mode [2]. Set it to ON(DF) to operate in the drop-frame mode *(page 46(E))*.

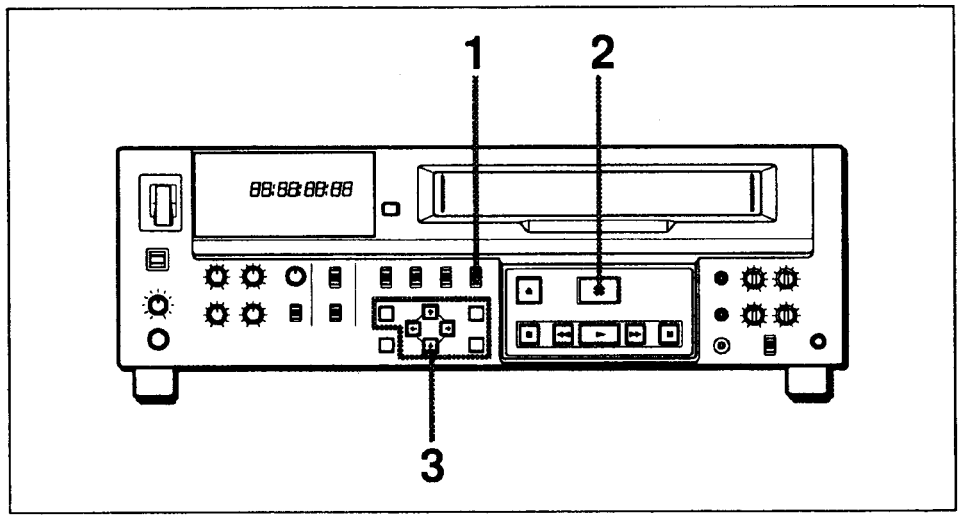
1) **Drop-frame mode:** In NTSC format, the actual number of frames per second is approximately 29.97, while that for the time code is specified as 30. Drop frame mode is a mode in which the time code is advanced in such a way that the difference in frame values between real time and the time code is corrected. In this mode, two frames are skipped at the beginning of each minute, except for every tenth minute, so that the frame value for time codes matches that for real time.

2) **Non-drop-frame mode:** A mode of advancing the time code in such a way that the difference in frame values between real time and the time code is neglected. Using this mode produces a difference of approximately 86 seconds per day between real time and the time code. Use this mode when the number of frames is important, such as in computer graphics.

Recording Time Code and User Bit on the Tape (SVO-5800/5800P only)

There are two ways of recording the time data – recording the data output from the built-in time code generator, and recording the external time data input. The external time data input can be recorded without synchronizing, or recorded after synchronizing the internal time code generator with the external data.

Recording the time data output from the internal time code generator



Recording the time data output from the internal time code generator

1 Set the time code generator selector to INT (internal time code generator).

2 Press the REC button to check the value of the internal time code generator. (The internal generator value is displayed during recording.)

3 Set the TIME CODE menu items as follows *(pages 46(E) and 47(E))*:

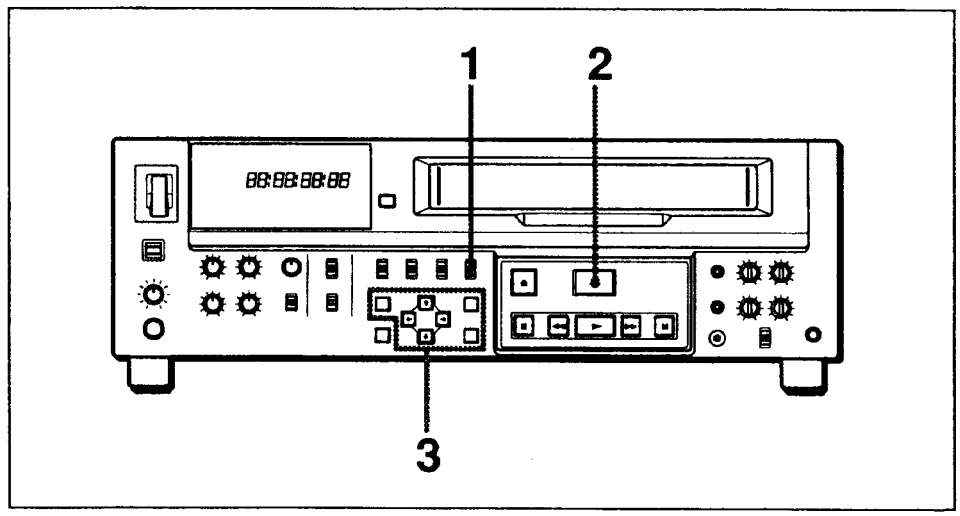
Menu Items	Settings
RUN CODE	FREE RUN or REC RUN
DF MODE	ON or OFF
VITC REC MODE	ON when recording VITC
INT TC MODE	Select whether to synchronize with the preset initial value, or the time code or user bit values recorded on the tape.
VITC POSI. 1 VITC POSI. 2	Select the insertion line of the VITC signal.

4 Set other menus according to the time data to be recorded.
- Set the NORMAL CH-2 item of the AUDIO CONTROL menu to TIME CODE for recording LTC *(page 49(E))*.
- Set the BLANKING item of the VIDEO CONTROL menu to ON (factory default setting) for recording VITC *(page 48(E))*.
  In this position, the VITC inserted in the input video signal is erased.

The above is the procedure for recording the time code output from the internal time code generator.

Recording the time data from the external time code generator

The time code (LTC or VITC) from the external time code generator can be recorded directly, or recorded after synchronizing the internal time code generator with the external data.
We recommend that you synchronize the internal time code generator if you set several VTRs to the same time, or if you want to record the playback time code from another VTR without deterioration.



Recording the time data output from the internal time code generator

1 Set the time code generator selector to EXT (external generator).

2 Press the REC button to check the internal time code generator value.
(The internal generator value is displayed during recording.)

(continued)

3 Set the TIME CODE menu items as follows *(pages 46(E) and 47(E))*:

Menu Items	Settings
RUN CODE	Automatically set to FREE RUN.
DF MODE	Automatically set to the same mode as that of the input time code (drop-frame mode or non-drop-frame mode).
VITC REC MODE	Set to OFF when recording VITC inserted in the external video signal without synchronization. Set to ON when recording VITC while synchronizing the internal time code generator.
EXT TC MODE	Set whether to record the external time code input with or without synchronizing the internal time code generator with the external time code.
EXT REGEN TC	Select the time code (LTC or VITC) from the external generator.
VITC POSI. 1 VITC POSI. 2	Select the insertion line of the VITC signal.

4 Set the following menus according to the time data to be recorded.

- Set the NORMAL CH-2 item of the AUDIO CONTROL menu to TIME CODE for recording LTC *(page 49(E))*.
- Set the BLANING item of the VIDEO CONTROL menu as follows *(page 48(E))*:

ON (factory default setting)	for recording VITC synchronized with the internal time code generator. In this position, VITC inserted in the input video signal is erased.
OFF	for recording VITC inserted in the input video signal.

The above is the procedure for recording the time code output from the external time code generator.

Synchronizing the internal time code generator with the external time data

Once it is synchronized, the internal time code generator keeps on running even if the external generator is disconnected.

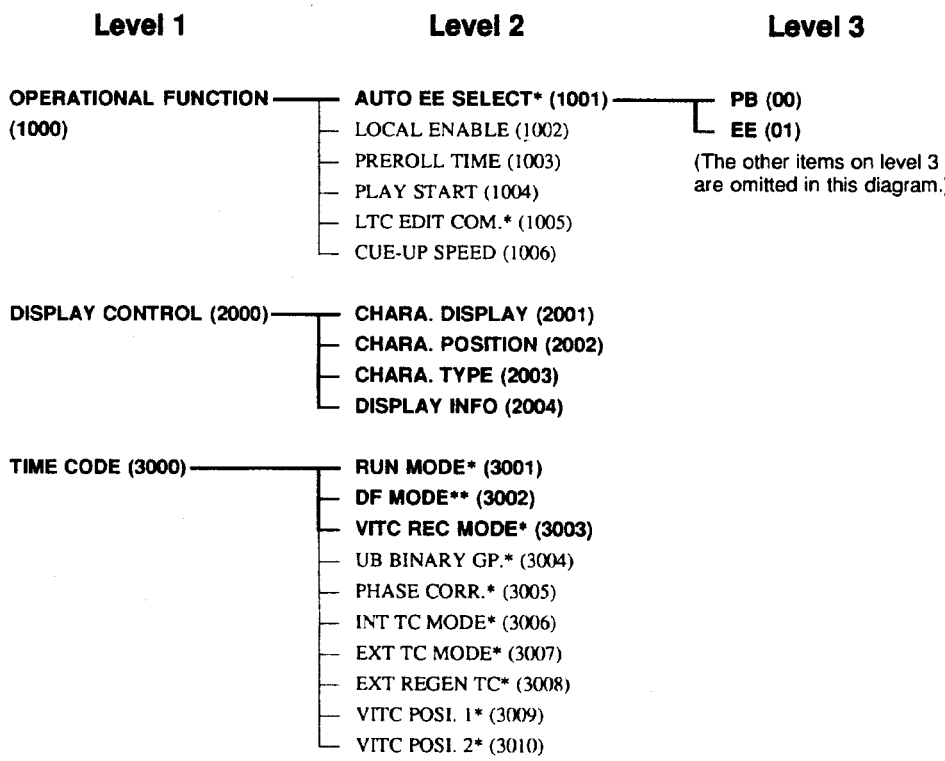
Changing the Settings of the Unit — Set-up Menu

The text information and major initial settings to be superimposed by the unit can be selected with a menu.
This section describes the structure of all the menus, the meaning of each item and how to change the settings.

Structure of Set-up Menu

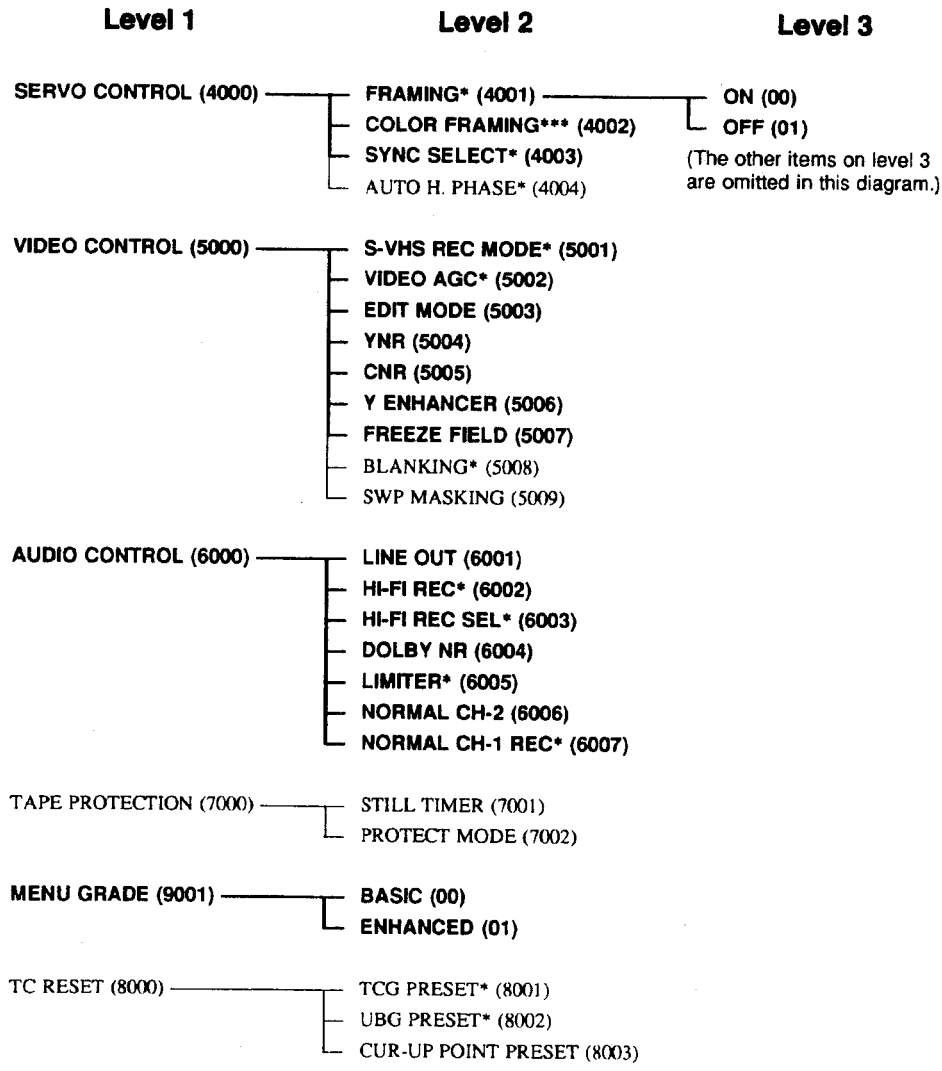
The menu screens are arranged in a three-level tree structures, as shown in the diagram below. The top-level selections (level 1) access the main divisions of the settings, and the settings themselves are made on levels 2 and 3. The settings are divided into two groups: the basic settings, to which frequent access is normally required, and the higher grade extended settings.
The settings of the menu are stored in the non-volatile memory; therefore they are not erased when the unit is turned off.

- The bold characters in the diragram indicate basic settings, and the normal characters, extended settings.
- The settings with an asterisk (*) are displayed only on the SVO-5800/5800P; those with two asterisks (**) only on the SVO-5800/SVP-5600; those with three asterisks (***) only on the SVP-5600P.
- The figures in parenthesis ( ) are code numbers displayed on the time counter display of the front panel of the unit.



(continued)

Changing the Settings of the Unit — Set-up Menu



Set-up Menu Descriptions

The table below lists the menu settings and explains the meaning of each setting.

- Factory default settings are marked with a frame [ ].
- The figures in parenthesis ( ) are code numbers displayed on the time counter display of the unit.

Menu items	Description
OPERATIONAL FUNCTION (1000)	**Settings relative to the operation of the unit**
AUTO EE SELECT (1001) (SVO-5800/5800P only)	Determines the mode in which the unit outputs the video/audio input signals from other equipment when the unit received a stop command through the 9-pin REMOTE connector.
[PB(00)]	Outputs the playback signal of the tape.
EE(01)	Outputs in EE mode.
LOCAL ENABLE (1002)	Selects which of the tape transport control buttons operate when the REMOTE/LOCAL switch is set to REMOTE.
[STOP & EJECT (00)]	Only the STOP and EJECT buttons are enabled.
ALL DISABLE (01)	All of the tape transport control buttons are disabled.
PREROLL TIME (1003)	Sets the preroll time in seconds, from 0 to 15 when the REMOTE/LOCAL switch is set to REMOTE. (If it is set from the editing control unit connected to the 9-pin REMOTE connector, this setting is ignored and the editing control unit setting takes precedence.)
00 SEC (00) – [5 SEC (05)] – 15 SEC (15)	
PLAY START (1004)	Sets the timing for switching to playback mode from stop mode in frames, from 4 to 16. It minimizes the phase adjustments and reduces the preroll time when editing.
04 FRAME DELAY (04) – [05 FRAME DELAY (05)] – 16 FRAME DELAY (16)	
LTC EDIT COM. (1005) (SVO-5800/5800P only)	Sets the command for insert editing of LTC from the 9-pin REMOTE connector.
[A3 (TC) (00)]	LTC recording for only A3 command.
A2&A3 (TC) (01)	LTC recording for A2 and A3 commands.
CUE-UP SPEED (1006)	Setting of cue-up operation
[F.FWD & REW SPEED (00)]	When the cue-up point is more than a minute away, the unit fast forwards or rewinds the tape.
SHUTTLE MAX SPEED (01)	Cue-up operation always occurs in the shuttle mode.
DISPLAY CONTROL (2000)	**Settings relative to display of the monitor screen and the indicator of the unit**
CHARA. DISPLAY (2001)	Sets whether the text information is output through the MONITOR VIDEO connector or not.
OFF (00)	Does not output the text information.
[ON (01)]	Outputs the text information.
CHARA. POSITION (2002)	Sets the position of the characters to be displayed on the monitor screen. Set while watching the monitor screen.
01,01 – [11,06] – 11,11 (SVO-5800/SVP-5600) 01,01 – [13,06] – 13,11 (SVO-5800P/SVP-5600P)	The first two digits are for vertical direction, and the latter two digits for horizontal direction. As the number gets bigger, the position moves toward the bottom and the right. The factory default setting is in the bottom center of the screen.

Changing the Settings of the Unit — Set-up Menu

Menu Items	Description
CHARA. TYPE (2003)	Type of character to be output from the MONITOR VIDEO connector to the monitor screen. Set while watching the monitor screen.
[BACKGROUND (00)]	White characters on black background.
OUTLINE (01)	White characters with black outline.
DISPLAY INFO (2004)	Sets the text information to be displayed on the monitor screen. As for the time data, the data selected by the CTL/TC/U-BIT selector and the LTC/AUTO/VITC selector of the unit is displayed.
[TIME DATA & STATUS (00)]	Displays the time data and the operation status of the unit.
TIME DATA & UB (01)	Displays the time data and user bits.
TIME DATA & CTL (02)	Displays time data and CTL.
TIME DATA ONLY (03)	Displays time data only.
TIME CODE (3000) Settings relative to time code generator	
RUN MODE (3001) (SVO-5800/5800P only)	Sets run mode of the time code generator.
[FREE RUN (00)]	Time code generator runs all the time.
REC RUN (01)	Time code generator runs only while recording.
Note Set to FREE RUN (00) when editing.	
DF MODE (3002)(SVO-5800/SVP-5600 only)	Selects the drop-frame mode of the time code generator and CTL counter (CTL counter only for SVP-5600).
[OFF (NDF) (00)]	Non-drop-frame mode. Set to this when the number of frames is important such as in computer graphics.
ON (DF) (01)	Drop-frame mode.
VITC REC MODE (3003) (SVO-5800/5800P only)	Sets whether to record VITC or not.
OFF (00)	Does not record VITC.
[ON (01)]	Records VITC.
UB BINARY GP. (3004) (SVO-5800/5800P only)	Selects the user bit binary group flag of the time code generator.
[NOT SPECIFIED (00)]	Character set is not specified.
ISO CHARACTER (01)	8-bit character which conforms to ISO 646 and ISO 2022
UNASSIGNED 1 (10)	Not specified.
UNASSIGNED 2 (11)	Not specified.
Note When the INT/EXT switch is set to EXT, the user bit binary group flag setting follows the setting in the time code selected by the EXT REGEN TC (3008) on next page.	
PHASE CORR. (3005) (SVO-5800/5800P only)	Selects whether the phase (LTC) of the time code generator is corrected or not.
[OFF (00)]	Phase is not corrected.
ON (01)	Phase is corrected.
INT TC MODE (3006) (SVO-5800/5800P only)	Selects the mode of the internal time code generator when the INT/EXT switch is set to INT.
[PRESET (00)]	The time code and user bit follow the values preset on this unit or the externally preset values through the 9-pin REMOTE connector.
TC & UB REGEN (01)	The time code and user bit are synchronized with the data recorded on the tape.
TC REGEN (02)	The time code is synchronized with the data recorded on the tape, and the user bit follows the value preset on the unit or tne externally preset values through the 9-pin REMOTE connector.

Menu items	Description
UB REGEN (03)	The user bit is synchronized with the data recorded on the tape, and the time code follows the value preset on the unit or the externally preset values through the 9-pin REMOTE connector.
Note Be sure to set to PRESET(00) when editing.	
EXT TC MODE (3007) (SVO-5800/5800P only)	Selects the mode of the internal time code generator when the INT/EXT switch is set to EXT.
PRESET (00)	Records the LTC input through the TIME CODE IN connector.
[TC & UB REGEN (01)]	The time code and user bit are synchronized with the time code selected by the EXT REGEN TC below.
TC REGEN (02)	The time code is synchronized with the time code selected by the EXT REGEN TC below, and the user bit data with the value preset on this unit.
UB REGEN (03)	The user bit follows the time code selected by the EXT REGEN TC below, and the time code data with the value preset on this unit.
EXT REGEN TC (3008) (SVO-5800/5800P only)	Selects the external time code to synchronize the internal time code generator.
[LTC (00)]	Synchronizes with the LTC input through the TIME CODE IN connector.
VITC (01)	Synchronizes with the VITC input through the VIDEO IN connector.
VITC POSI.1 (3009) (SVO-5800/5800P only)	Selects the insertion line of the VITC signal between 10 and 21 (SVO-5800) or 7 and 22 (SVO-5800P).
10 LINE (10) - [16 LINE (16)] - 21 LINE (21)(SVO-5800)	
7 LINE (07) - [19 LINE (19)] - 22 LINE (22)(SVO-5800P)	
VITC POSI. 2 (3010) (SVO-5800/5800P only)	Selects the insertion line of the VITC signal between 10 and 21 (SVO-5800) or 7 and 22 (SVO-5800P).
10 LINE (10) - [18 LINE (18)] - 21 LINE (21)(SVO-5800)	
7 LINE (07) - [21 LINE (21)] - 22 LINE (22)(SVO-5800P)	
SERVO CONTROL (4000) (SVO-5800/5800P only) Settings relative to servo control	
FRAMING (4001) (SVO-5800/5800P only)	Selects whether framing servo is controlled or not.
OFF (00)	Framing servo is not controlled. Set to this position when editing tape without frame control, such as tape recorded with a home VTR.
[ON (01)]	Framing servo is controlled. Set to this position in ordinary use.
COLOR (02)	Color framing servo is controlled.
COLOR FRAMING (4002) (SVP-5600P only)	Selects whether color framing servo for the signal input through REF VIDEO IN is controlled or not.
[OFF (00)]	Color framing servo is not controlled.
ON (01)	Color framing servo is controlled.
SYNC SELECT (4003) (SVO-5800/5800P only)	Selects the reference signal for servo control.
EXT (00)	Use the signal input through REF VIDEO IN as a reference.
[AUTO (01)]	Change the reference signal according to the mode of the VTR.
AUTO H PHASE (4004) (SVO-5800/5800P only)	Select the phase of the video signal to be recorded on the tape. It prevents picture instability of the editing point at the time of interchangeable editing due to the difference in head changing position.
[OFF (00)]	Set the phase to 6.5H. Set to this position when recording frame by frame, such as in animation.
ON (01)	Align the phase with that of the tape to be edited. Set to this position in ordinary use.

Changing the Settings of the Unit — Set-up Menu

Menu Items	Description
VIDEO CONTROL (5000)	**Settings relative to video signal control**
S-VHS REC MODE (5001) (SVO-5800/5800P only)	Selects the recording format.
OFF (00)	Records in VHS format regardless of type of cassette.
ON (01)	Records in S-VHS format on S-VHS cassette, and VHS format on VHS cassette.
[AUTO (02)]	Automatically selects S-VHS or VHS according to the previously recorded format of the tape, when editing on S-VHS cassette.
VIDEO AGC (5002) (SVO-5800/5800P only)	Selects whether the video level is automatically adjusted or not during recording.
OFF (00)	Video level is not automatically adjusted.
[ON (01)]	Video level is automatically adjusted.
EDIT MODE (5003)	Selects the picture quality according to the unit's operating mode.
[OFF (00)]	Set to this position for normal playback.
ON (01)	Set to this position when editing.
YNR (5004)	Selects the level of the digital luminance noise reduction circuit.
OFF (00)	Does not activate.
LEVEL 1 (01)	Weak level
[LEVEL 2 (02)]	Medium level
LEVEL 3 (03)	Strong level
Note After-image may be visible if you dub on a tape repeatedly with YNR set to a position other than OFF (00).	
CNR (5005)	Selects the level of the digital chroma noise reduction circuit.
OFF (00)	Does not activate.
LEVEL 1 (01)	Weak level
LEVEL 2 (02)	Medium level
[LEVEL 3 (03)]	Strong level
Note After-image may be visible if you dub on a tape repeatedly with CNR set to a position other than OFF (00).	
Y ENHANCER (5006)	Selects whether the digital luminance enhancer circuit is activated or not.
OFF (00)	Digital luminance enhancer circuit is not activated.
[ON (01)]	Digital luminance enhancer circuit is activated.
FREEZE FIELD (5007)	Selects which image to freeze when the FREEZE command is received during normal playback.
[COMMAND FIELD (00)]	Freezes the image of the same field when the command is received.
1ST FIELD (01)	Freezes the image of the first field at any time.
2ND FIELD (02)	Freezes the image of the second field at any time.
BLANKING (5008) (SVO-5800/5800P only)	Determines whether or not to mask the data inserted in the V blank during recording.
OFF (00)	Blanking is not done.
[ON (01)]	Blanking is done for the lines between 10 and 21 (all lines) (SVO-5800) or 7 and 22 (all lines) (SVO-5800P) of V-BLANK.
SWP MASKING (5009)	Determines whether or not to do masking on the video signal switching portion during playback with the TBC set to ON.
[OFF (00)]	Masking is not done.
ON (01)	Masking is done.

Menu items	Description
AUDIO CONTROL (6000)	**Settings relative to audio signal control**
LINE OUT (6001)	Selects the signal to be output from the AUDIO OUT (NORM/Hi-Fi) connector.
HI-FI (00)	Outputs the audio signal of hi-fi recording.
[NORMAL (01)]	Outputs the audio signal of normal audio recording.
HI-FI REC (6002) (SVO-5800/5800P only)	Determines whether the audio signal is hi-fi recording or not.
OFF (00)	Not hi-fi recording
[ON (01)]	Hi-fi recording
HI-FI REC SEL (6003) (SVO-5800/5800P only)	Selects the audio signal for hi-fi recording.
HI-FI INPUT (00)	Records the signal to be input through the AUDIO IN (Hi-Fi) connector.
[NORMAL INPUT (01)]	Records the signal to be input through the AUDIO IN (NORM/Hi-Fi) connector.
DOLBY NR (6004)	Determines whether the Dolby noise reduction circuit is activated for normal audio or not.
[OFF (00)]	Dolby noise reduction circuit is not activated.
ON (01)	Dolby noise reduction circuit is activated.
LIMITER (6005) (SVO-5800/5800P only)	Determines whether the limiter circuit is activated for normal audio or not.
[OFF (00)]	Limiter circuit is not activated.
ON (01)	Limiter circuit is activated.
NORMAL CH-2 (6006)	Selects the use of channel 2 for normal audio recording.
[AUDIO (00)]	Used for audio recording.
TIME CODE (01)	Used for time code recording.
Notes • In AUDIO position, time code noise is output through the audio output and monitor output of channel 2 of the normal audio track if you play back a tape on which time code (LTC) is recorded in channel 2. • In TIME CODE position, the sound recorded in channel 2 of the normal audio track cannot be output or monitored if you play back a tape on which the sound is recorded in channel 2.	
NORMAL CH-1 REC (6007) (SVO-5800/5800P only)	Selects the audio signal to be recorded on channel 1 for normal recording.
[CH-1 ONLY (00)]	Records the signal input through CH-1 of the AUDIO IN (NORM/Hi-Fi) connector.
CH-1/CH-2 MIX (01)	Records the mixed signals input through CH-1 and CH-2 of the AUDIO IN (NORM/Hi-Fi) connector.
TAPE PROTECTION (7000)	**Settings relative to tape protection**
STILL TIMER (7001)	Selects the time from the playback/record pause mode (pause/freeze picture) to the mode set by PROTECT MODE.
[5 MIN (00)], 4 MIN (01), 3 MIN (02), 2 MIN (03), 1 MIN (04), 50 SEC (05), 40 SEC (06), 30 SEC (07), 20 SEC (08), 10 SEC (09), 5 SEC (10), 0.5 SEC (11)	
PROTECT MODE (7002)	Selects the tape protect mode, which shifts after the time set by the STILL TIMER passes.
[STEP FWD (00)]	Tape is step-fed in the forward direction at 1/5 speed for about 1 second.
STOP (01)	Enters the stop mode.
TENSION RELEASE (02)	Enters the tension release mode.

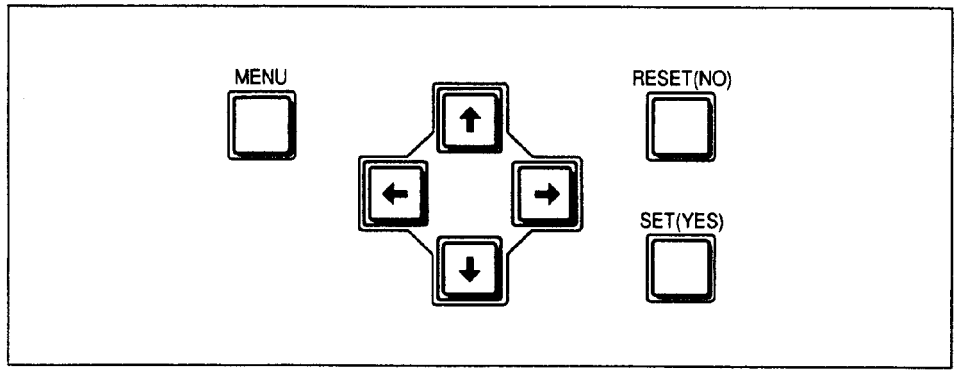
Menu Items	Description
MENU GRADE (9001)	**Selects the menu to be displayed**
BASIC (00)	Displays only the basic settings.
ENHANCED (01)	Displays the basic settings and extended settings.
TC PRESET (8000)	**Settings relative to preset of time code value**
TCG PRESET (8001) (SVO-5800/5800P only)	Initial value setting menu for time code
UGB PRESET (8002) (SVO-5800/5800P only)	Initial value setting menu for user bit
CUE-UP POINT PRESET (8003)	Selects the time code of the cue-up point.

Changing the Settings of Set-up Menu

Although the menu settings are divided into basic and extended settings, the method of the settings is the same.

Buttons used to change the settings

This operation uses the following buttons on the front panel.



MENU button	• Opens the menu and enters the menu mode. • Closes the menu and quits the menu mode.
↑ ↓ buttons	Move the reverse video cursor up and down to change the settings and conditions within a level. If this button is held down, the reverse video cursor continues to move.
← → buttons	• The → button moves to the menu at the next lower level. • The ← button moves to the menu at the next higher level. If either button is held down, the reverse video cursor continues to move.
SET(YES) button	• Stores the changed settings in the memory. • Answers "YES" to a question on the monitor screen.
RESET(NO) button	• Initializes the settings (return to the factory default settings). • Answers "NO" to a question on the monitor screen.

Notes

- If you turn off the unit after changing the settings while it is in the process of saving the settings, the settings may be lost. Wait until saving is complete before turning the unit off.
- If you press the MENU button without pressing the SET(YES) button, the new settings will not be stored. "ABORT!" is displayed on the monitor screen for 0.5 seconds and the menu is forced to finish. Be sure to press the SET(YES) button after changing the settings.

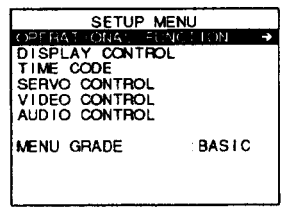
Changing the settings

This section describes how to change the settings. For example, changing the PROTECT MODE of the TAPE PROTECTION menu to STOP. See page 44(E) to confirm that this is an extended setting and is level 2 of the TAPE PROTECTION menu.

Displaying the extended settings

1 Press the MENU button.
All the basic settings of the level 1 menu appear on the monitor screen.
The reverse video cursor shows the current selection. The arrow on the right indicates that there is a lower level setting or condition.
The time counter display of the unit shows the selected setting only.

Level 1 menu display (basic setting)

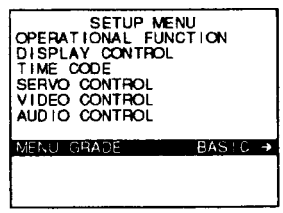


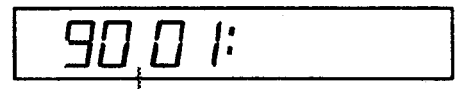
Monitor screen

Time counter display

2 Press the ⊡ button to select "MENU GRADE: BASIC."
A colon (:) in front of BASIC indicates the factory default setting.

Selecting the setting change menu

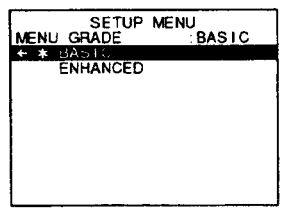


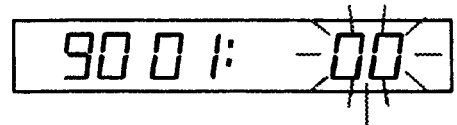


Code number of MENU GRADE (9001)

3 Press the ⊟ button.
The settings of MENU GRADE are displayed.
The current selection appears on the monitor screen in reverse video. The arrow on the left indicates that there is an upper level setting. An asterisk (*) in front of BASIC indicates the factory default setting.

Displaying the settings

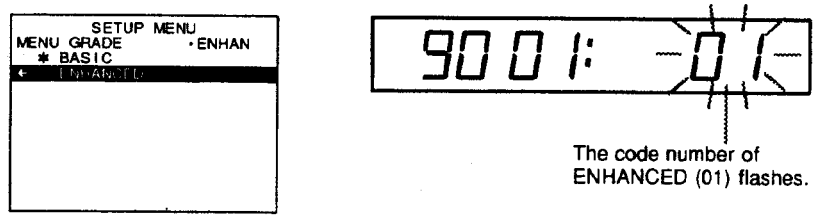




The code number of BASIC (00) flashes.

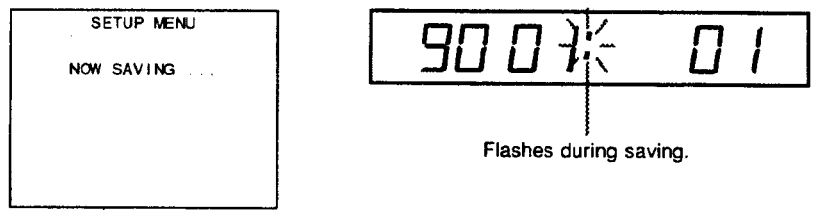
4 Press the ⊡ button to select "ENHANCED."

Selecting the setting to be changed



5 Press the SET(YES) button.
The message shown below appears and the new setting is saved in the memory. When you open the menu the next time, the extended settings will appear on the monitor screen.

Messages during saving

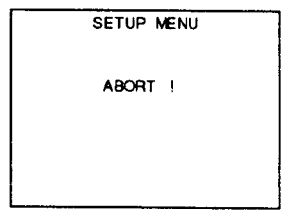


Once the saving operation is complete, both the monitor screen and time counter display return to the normal state.

Notes

- If you turn off the unit while it is in the process of saving the settings, the settings may be lost. Wait until saving is complete before turning the unit off.
- If you press the MENU button without pressing the SET(YES) button, the new settings are not saved. The display shown below appears for 0.5 seconds and the menu is forcibly exited. Be sure to press the SET(YES) button after changing the settings.

Message of forcibly exiting the menu

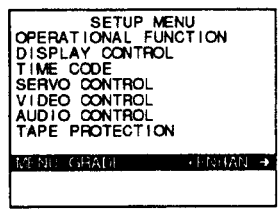


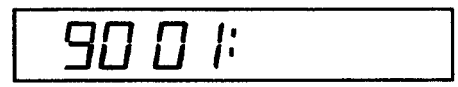
(continued)

Changing the settings

1 Press the MENU button.
All the extended settings of level 1 appear on the monitor screen.
The reverse video cursor shows the current selection, "MENU GRADE • ENHAN," made in the previous section, "Displaying the extended settings."
The point " • " in front of ENHAN indicates that the setting differs from the factory default setting.

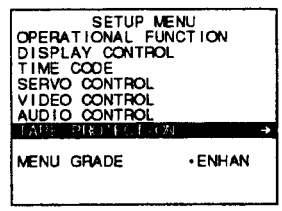
Displaying level 1 extended settings





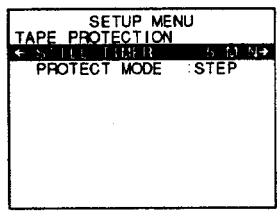
2 Press the ⊡ button to select "TAPE PROTECTION."

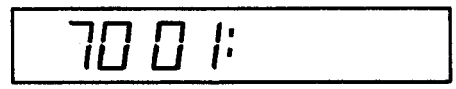
Selecting setting change menu



3 Press the ⊡ button.
The level 2 settings of TAPE PROTECTION appear.

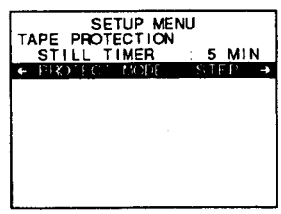
Displaying settings

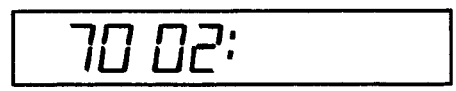




4 Press the ⊡ button to select "PROTECT MODE."

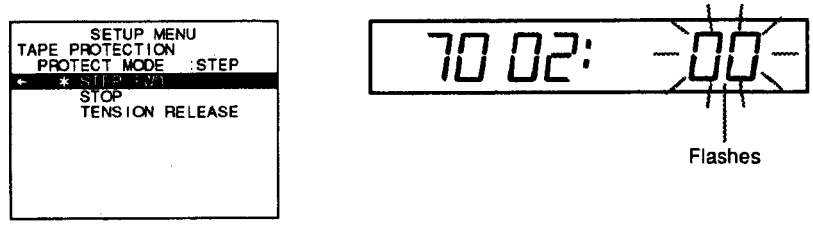
Selecting the setting change item





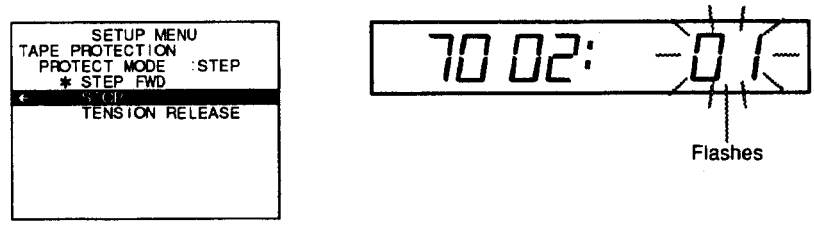
5 Press the ⊟ button.
The level 3 settings appear as a lower level of PROTECT MODE.

Displaying setting conditions



6 Press the ⊡ button to select "STOP."

Selecting the setting to be changed



- Press the RESET(NO) button to initialize this setting (return to the factory default setting).

7 Press the ⊟ button to return to the upper level when changing other settings, and repeat steps 2 to 6.

8 Press the SET(YES) button.
The display "NOW SAVING..." appears on the monitor screen, the colon ":" on the time counter display flashes, and the new setting is saved in the memory. Once the saving operation is complete, both the monitor screen and time counter display return to the normal state.

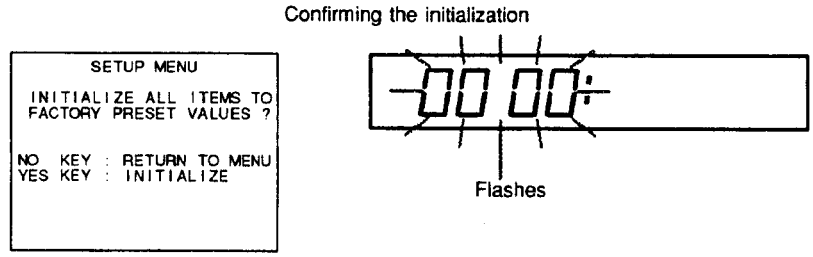
Notes

- If you turn off the unit while it is in the process of saving the settings, the settings may be lost. Wait until saving is complete before turning the unit off.
- If you press the MENU button without pressing the SET(YES) button, the new settings are not saved. "ABORT!" is displayed for 0.5 seconds and the menu is forcibly exited. Be sure to press the SET(YES) button after changing the settings.

Initializing all the settings

1 Press the MENU button to display the level 1 settings.

2 Press the RESET(NO) button.
The display below appears on the monitor screen, which is intended to ask the user to confirm the initialization.


SETUP MENU
INITIALIZE ALL ITEMS TO FACTORY PRESET VALUES ?
NO KEY : RETURN TO MENU
YES KEY : INITIALIZE
Confirming the initialization
Flashes

3 Press the SET(YES) button.
This returns all the menu settings to their factory defaults. The message "NOW SAVING..." appears on the monitor screen, the colon ":" on the time counter display flashes, and the new settings are saved in the memory.

- If you press the RESET(NO) button instead of the SET(YES) button, the initialization is not carried out, and the display returns to the level 1 menu screen.

Note

If you turn off the unit while it is in the process of saving the settings, the initialization cannot be done. Wait until saving is complete before turning the unit off.

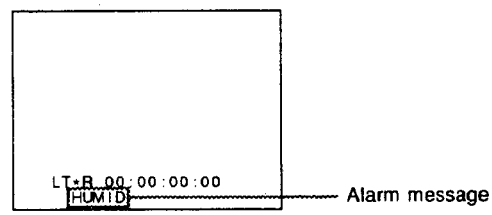
Operational Problems

This section describes the alarm messages which indicate misoperations or problems with the unit and what to do in such cases. Check this section before consulting your Sony service representative.

Alarm Messages

There are a number of messages which may appear on the monitor screen during operation.

Example of alarm message



These alarm messages indicate misoperations or problems with the unit, such as condensation on the drum. Check the following table in such cases.

Note

To display these messages on the monitor screen, the monitor must be connected to the MONITOR VIDEO connector, and the CHARA. DISPLAY item of the DISPLAY CONTROL menu must be set to ON *(page 45(E))*.

List of alarm messages

The alarm messages which are likely to be displayed are as listed below.

Alarm messages on the monitor screen	Meaning of alarm	What to do
HUMID	Condensation[1] has been detected.	Cassette is ejected automatically. Keep the power on and wait until this message disappears.
NOT LOCAL!	REMOTE mode is selected.	Set the REMOTE/LOCAL switch to LOCAL.
NOT TC/UB SELECT! NOT TCG PRESET! NOT UBG PRESET!	CTL mode is selected.	Set the CTL/TC/U-BIT selector to TC or U-BIT.
NOT INTERNAL!	External time code generator mode is selected.	Set the EXT/INT switch to INT.

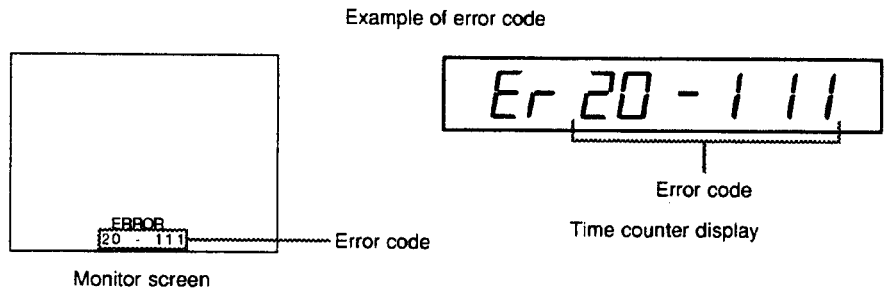
1) **Condensation:** If the unit is suddenly moved from a cold to a warm location, or used in a hot room, moisture from the air can condense on the head drum. This is called condensation, and if the tape runs in this condition, the tape may stick to the drum, in which case it is highly likely to be damaged.

Self-Diagnosis Functions – Error Codes

This unit is provided with self-diagnosis functions which detect internal faults. If a fault is detected, the unit displays an error code on the monitor screen and the time counter display of the unit.

Note

To display the error codes on the monitor screen, the monitor must be connected to the MONITOR VIDEO connector, and the CHARA. DISPLAY item of the DISPLAY CONTROL menu must be set to ON *(page 45(E))*.



Consult your Sony service representative if an error code is displayed.

Troubleshooting Chart

Tape problems		
Symptom	**Cause**	**Remedy**
Recording is not possible.	The safety tab on the cassette is broken.	Cover it with plastic tape, or use another tape.
The tape transport buttons (PLAY, F FWD, REW buttons, etc.) do not operate.	The REMOTE/LOCAL switch is set to REMOTE.	Set the REMOTE/LOCAL switch to LOCAL.
	No cassette is loaded.	Insert a cassette.

Time data problems		
Symptom	**Cause**	**Remedy**
It is not possible to preset the time counter display to an arbitrary value. (SVO-5800/ 5800P only)	The time code generator selector is set to EXT.	Set the selector to INT.
	The time counter display selector is set to CTL.	Set the selector to TC or U-BIT.
	The REMOTE/LOCAL switch is set to REMOTE.	Set the switch to LOCAL.
Although the tape transport is operating, the time counter value does not change.	The MENU button or TC PRESET button has been pressed.	Press these buttons again to exit from menu setting mode or time code preset mode. (In either of these modes, the time counter display does not show time data)
	The time counter display is showing user bit data.	Set the timer counter display selector to CTL or TC.

Monitor problems		
Symptom	**Cause**	**Remedy**
The picture does not appear in the EE mode. (SVO-5800/ 5800P)	The connector to which the video signal is input does not match the setting of the VIDEO IN SELECT switch.	Match the setting of the switch with the connector to which the video signal is input.
The text information does not appear on the monitor screen.	The CHARA. DISPLAY item of the DISPLAY CONTROL menu is set to OFF.	Set it to ON.
	The monitor is not connected to the MONITOR VIDEO connector.	Connect the monitor to the MONITOR VIDEO connector. (Be sure to use the MONITOR VIDEO connector when outputting the text information.)
The monitor screen is too bright.	The monitor INPUT connector 75-ohm termination switch is set to OFF, or there is not terminating device.	Set the 75-ohm termination switch to ON, or connect a terminating device.
The monitor screen is too dark.	The 75-ohm termination of the video signal input is duplicated. Ex.) The 75-ohm termination switches of both the REF VIDEO IN connector and VIDEO IN connector are set to ON (Bridge connection through the REF VIDEO IN connector).	Set the 75-ohm termination switch of the connector being used for bridge connection to OFF.
The video image is too dark when editing a composite video signal.		

Regular Checks and Maintenance

Head Cleaning

If the image becomes unclear or disappears suddenly, the video heads are dirty. Clean the heads using the T-25CL cleaning cassette (not supplied). Follow the procedure below. As improper use can damage the heads, read the manual for the cleaning cassette carefully before using it.

Cleaning procedure

Insert the cleaning cassette and press the PLAY button. Press the STOP button in about ten seconds, and eject the cleaning cassette.

Notes

- Be sure to eject the cleaning cassette after use, so that the video heads are not damaged.
- Cleaning should last about 10 seconds. If you use the cleaning cassette for more than 10 seconds, it may shorten the longevity of the heads.
- Do not rewind the cleaning cassette until it reaches the end. It can be used 4 to 5 times repeatedly by rewinding it. If you use it more, its effectiveness will be reduced.
- Do not use a wet-type cleaning cassette. It may damage the unit.

Checking the time to change video heads

If the picture is still unclear after cleaning, the video heads need to be replaced. The life of video heads is 500 to 1000 service hours. The cumulative total hours of tape transportation can be displayed on the digital hours meter in T2 mode *(page 61(E))*.

Note

Consult your Sony service representative for changing the video heads.

Checking the Time of Maintenance
— Digital Hours Meter

The digital hours meter keeps a cumulative count of the total operating time, the drum rotation time, the tape transport operating time, and the number of threading and unthreading operations. These counts can be displayed on the monitor and time counter display. Use them as guidelines for scheduling maintenance. Consult your Sony service representative about necessary periodic maintenance checks.

Digital hours meter indication modes

The digital hours meter provides the following four display modes:

T1: DRUM ROTATION-1 mode
Cumulative total of hours of drum rotation with tape threaded.

T2: DRUM ROTATION-2 mode (Resettable)
Cumulative total of hours of drum rotation with tape threaded.

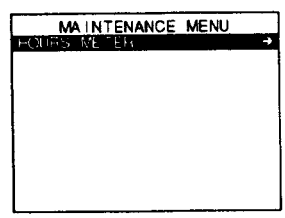
C1: THREADING mode (Resettable)
Cumulative number of tape threading/unthreading operations.

C2: CASSETTE LOADING mode (Resettable)
Cumulative total of hours of tape transport operation.

Displaying the digital hours meter

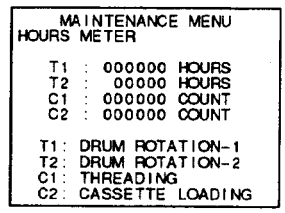
1 Hold down the ⇦ button and press the MENU button.
The maintenance menu is displayed on the monitor screen and HOURS METER is selected.

Maintenance menu display

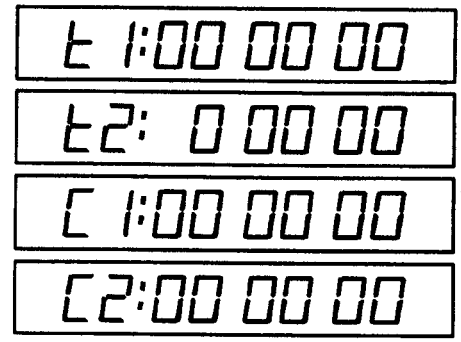


(continued)

2 Press the ⊟ button.
All four modes are displayed on the monitor screen, and one of them is displayed on the time counter display.



Monitor screen



Time counter display

3 Press the ⊡ ⊡ buttons to select the display on the time counter display.

Ending the digital hours meter display
Press the MENU button.

Resetting the digital hours meter
Consult your Sony service representative.

Specifications

General

Power requirements	SVO-5800/SVP-5600: 100 to 120 V AC, 50/60Hz SVO-5800P/SVP-5600P: 220 to 240 V AC, 50/60Hz
Power consumption	SVO-5800/5800P: 55W SVP-5600/5600P: 49 W
Orientation	Horizontal
Operating temperature	+5 °C to +40 °C (+41 °F to +104 °F)
Storage temperature	–20 °C to + 60 °C (–4 °F to +140 °F)
Humidity	35 % to 80 %
Mass	Approx. 11.5 kg (25 lb 6 oz)
External dimensions	425 × 145 × 457 mm (w/h/d) (16 3/4 × 5 3/4 × 18 inches) excluding external projections

Tape transport system

Tape speed	SVO-5800/SVP-5600: 33.35 mm/s SVO-5800P/SVP-5600P: 23.39 mm/s
Maximum recording/playback time	Approx. 120 minutes (for T-120/E-120)
Fast forward/rewind time	2 minutes 30 seconds or less (for T-120/E-120)
Recommended cassettes	S-VHS or VHS tape

Video system

Video signal	SVO-5800/SVP-5600: NTSC color, EIA standard SVO-5800P/SVP-5600P: PAL color, CCIR standard
Recording method	Rotary 2-head, helical scan azimuth recording, S-VHS/VHS format
Luminance recording method	FM
Color recording method	Subcarrier low frequency conversion method
Horizontal resolution	240 lines (VHS) More than 400 lines (S-VHS)
S/N	SVO-5800/SVP-5600: 47 dB (color) (VHS) SVO-5800P/SVP-5600P: 46 dB (color) (VHS)
Recording level control	Automatic/fixed

Audio system

Number of tracks	4 (2 hi-fi channels, 2 normal audio channels)
S/N	More than 43 dB (3% distortion, normal audio, Dolby NR OFF mode)
Frequency response	50 to 12,000 Hz (normal audio) 20 to 20,000 Hz (hi-fi audio)
Dynamic range	More than 90 dB (hi-fi audio)
Recording level control	Manual/limiter, switchable (normal audio) Manual (hi-fi audio)

Specifications

Processor adjustment range

System subcarrier phase	360° p-p
System sync phase	–1 to +3 µs
Y/C delay	±200 ns (70 ns step)
Video level	±3.0 dB
Chroma level	±3.0 dB
Set up level (SVO-5800/SVP-5600)	–7 to +15 IRE
Black level (SVO-5800P/SVP-5600P)	–50 to +100 mV
Hue (SVO-5800/SVP-5600)	±30 °
Chrominance phase (SVO-5800P/SVP-5600P)	±30 °

Input connectors

Video inputs

REF VIDEO IN
BNC type × 2 (loop-through)
Black burst or 1.0 Vp-p ± 0.3 V, 75-ohm, unbalanced, sync negative (286 mV for SVO-5800, 300 mV for SVO-5800P)

VIDEO IN (SVO-5800/5800P only)
BNC type × 2 (loop-through)
Composite video, 1.0 Vp-p ± 0.3 V, 75-ohm, unbalanced, sync negative (286 mV for SVO-5800, 300 mV for SVO-5800P)

S VIDEO IN (SVO-5800/5800P only)
4-pin mini DIN × 1
Luminance signal: 1.0 Vp-p, 75-ohm, unbalanced, sync negative
Color signal: 0.286 Vp-p for SVO-5800/0.3 Vp-p for SVO-5800P, burst, 75-ohm, unbalanced

Audio inputs (SVO-5800/5800P only)

AUDIO IN (NORM/Hi-Fi) CH-1/CH-2
XLR 3-pin × 2
–6 dBm/0 dBm/+4 dBm (switching internally high impedance/600-ohm)

AUDIO IN (Hi-Fi) CH-1/CH-2
XLR 3-pin × 2
–6 dBm/0 dBm/+4 dBm (switching internally high impedance/600-ohm)

Time code input (SVO-5800/5800P only)

TIME CODE IN
BNC type × 1
0 dBu ± 6 dB(0 dBu = 1.55 Vp-p pulse), unbalanced

Output connectors

Video outputs

VIDEO OUT
BNC type × 1
Composite video, 1.0 Vp-p, 75-ohm, unbalanced, sync negative (286 mV for SVO-5800/SVP-5600, 300 mV for SVO-5800P/SVP-5600P)

MONITOR VIDEO
BNC type × 1
Composite video, 1.0 Vp-p, 75-ohm, unbalanced, sync negative (286 mV for SVO-5800/SVP-5600, 300 mV for SVO-5800P/SVP-5600P)

COMPONENT VIDEO OUT (with the optional SVBK-170 installed)
BNC type × 3
Y: 1.0 Vp-p, 75-ohm, unbalanced, sync negative
R-Y: 0.7 Vp-p, 75-ohm, unbalanced
B-Y: 0.7 Vp-p, 75-ohm, unbalanced

S VIDEO OUT
4-pin mini DIN × 2
Luminance signal: 1 Vp-p, 75-ohm, unbalanced
Color signal: 0.286 Vp-p for SVO-5800/SVP-5600, 0.3 Vp-p for SVO-5800P/SVP-5600P, burst, 75-ohm, unbalanced

Audio outputs

AUDIO OUT (NORM/Hi-Fi) CH-1/CH-2
XLR 3-pin × 2
–6 dBm/0 dBm/+4 dBm, switchable (low impedance output)

AUDIO OUT (Hi-Fi) CH-1/CH-2
XLR 3-pin × 2
–6 dBm/0 dBm/+4 dBm, switchable (low impedance output)

MONITOR AUDIO
Phono jack × 1
–5dBu (at 47 k ohm load), unbalanced (0 dBu = 0.775 Vrms)

Headphones output

HEADPHONES
Stereo phone jack × 1
Max. –18 dBu (at 8-ohm load) (0 dBu = 0.775 Vrms)

Time code output

TIME CODE OUT
BNC type × 1
0 dBu (0 dBu = 1.55 Vp-p pulse), low impedance output, unbalanced

Specifications

Remote connector

TBC REMOTE	15-pin multi × 1
REMOTE 9P	9-pin multi × 1
REMOTE	Control S (power supply type) × 1

Supplied accessories

AC power cord (1)
Operating Instructions (1)
Menu card (1)

Optional accessories

T-25CL Cleaning Cassette
SVBK-170 Component Output Board
SVRM-100 Remote Control Unit
RMM-980 Rack Mount Kit

Relative equipment

RM-450/450CE, PVE-500, BVE-910 Editing Control Unit
DFS-500/500P DME Switcher
FXE-100/100P Video Editing System
UVR-60 TBC Remote Control Unit
Sony Tektronix TSG 130 (NTSC)/131 (PAL) Video Signal Generator

Design and specifications are subject to change without notice.